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0209
              IN THE UNITED STATES DISTRICT COURT
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                FOR THE DISTRICT OF NEW MEXICO
 3
     CHEVRON MINING,
 5
               Plaintiff
 6
                               No. 1:13-CV-00328 PJK/JFR
     UNITED STATES OF AMERICA,
     UNITED STATES DEPARTMENT OF THE INTERIOR,
 8
     UNITED STATES DEPARTMENT OF AGRICULTURE,
 9
               Defendants.
10
11
12
                   TRANSCRIPT OF PROCEEDINGS
13
                        March 15, 2022
14
                           Volume 2
                        Pages 209 - 444
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16
     BEFORE: HONORABLE JUDGE PAUL KELLY
              UNITED STATES 10TH CIRCUIT JUDGE
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          Proceedings reported by stenotype.
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          Transcript produced by computer-aided
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     transcription.
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0210
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22
23
24
25
0212
               THE COURT: Good morning, you may be
1
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seated.
 3
               Where is our witness?
 4
              MR. TODD: Dr. Rigby is back there, Your
    Honor. I think we have one thing to take care of.
 5
 6
               THE COURT: He is hiding back there?
 7
               MR. TODD: He will be called in a minute,
 8
    Your Honor. We have one other item to deal with
 9
     first, if that is okay.
10
               MS. KIMBALL: Your Honor, we have not yet
11
    moved to admit the deposition designations. We just
12
     want to jointly move to admit the deposition
13
     designations into the record.
14
               THE COURT: All right.
15
               MR. TODD: Chevron recalls Dr. Rigby.
               THE COURT: Okay. You are still under
16
17
    oath.
18
               (Whereupon, the witness was previously
19
    sworn.)
20
               THE COURT: You may proceed.
               MS. KIMBALL: Thank you, Your Honor. All
21
22
    right. Can you hear me all right?
23
               THE COURT: I'm sorry?
24
              MS. KIMBALL: Can you hear me all right?
25
               THE COURT: Go ahead.
0213
                 CROSS-EXAMINATION (Continued)
1
        BY MS. KIMBALL:
              Dr. Rigby, Chevron conducted a substantial
    amount of exploration after the end of the DMEA
 5
    contract and before developing the open pit,
 6
    correct?
 7
               Certainly did.
         Α.
 8
              And no Federal employee told Chevron how
         Q.
9
    to conduct its privately-financed exploration,
10
     correct?
11
         Α.
              Not that I am aware of.
12
               Chevron did not consult with DMEA or any
         Q.
13
    other Federal agency when developing the open pit,
14
     correct?
15
               I am not in a position to really say.
        Α.
16
     don't know what they did.
17
              All right. Let's turn to your opinions
     regarding the Red River plan.
18
19
               You testified that Chevron had an idea to
20
     dump its waste rock on top of the state highway and
21
     river in the Red River Canyon, correct?
22
        Α.
               I did.
23
               And the highway we are talking about is
         Q.
24
     State Highway 38, correct?
25
        Α.
              It is.
0214
1
        Q.
             And the river is the Red River, correct?
```

Yes. Α. 3 MS. KIMBALL: Let's pull up U.S. Demo 03. 4 (By Ms. Kimball) Do you recognize this Q. 5 image as the image of the mine as it is today? I believe so, yes. 6 Α. 7 And can you just identify on this drawing Q. 8 where the Red River fill plan would be. 9 So it would run the entire length from 10 Columbine Canyon down to the mill facility, correct? 11 What was the question? 12 Your plan would run from Columbine Canyon Q. 13 down to the mill facility? 14 Not necessarily. That is the route, the 15 relevant place. You see the front piles on the 16 right-hand side there, but my own belief, the 17 designs, the concepts that we came up with, it was never defined how long that tunnel, culvert would 18 19 need to be, there is so much flexibility in the 20 design. You know, maybe I think I said in my 21 22

You know, maybe I think I said in my report a half a mile. It could have been a quarter of a mile, it could have been -- you know, the minimum would have been 150 feet if you just needed a bridge to cross the 38 and the Red River. So we

give examples of what it would look like and some alternative lengths, but that was never finalized because the concept was basically killed.

- Q. And so you have never actually seen any engineering plans for what they were planning to do, correct?
- A. I heard yesterday that some did exist but, unfortunately, I haven't seen any other than the ones that we prepared.
- Q. You have never seen anything that Molycorp prepared?
 - A. No.

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0215

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- Q. And you have never seen any evidence that they presented any plans to the Forest Service?
 - A. Not that I am aware of.
- Q. And how tall would the valley fill have needed to have been?
- A. Again, if you read my report, I do discuss the flexibility that one had. And in terms of, I mean, we have a volume that we need to dispose of, maybe 350 million tons or thereabouts, but you have got so many different dimensions. You have got both sides of the valley, and therefore -- and the dimensions that you could use with that volume and that tonnage really would depend upon -- because I
- believe in progressive restoration, you would

```
basically build the waste-rock dumps with a view to
 3
     a final landfall and a final restored surface.
 4
               And therefore not having been finalized,
 5
     my point is you could have placed the waste-rock to
 6
     replicate the topography in the region so that
     post-reclamation and restoration with trees, scrub,
 7
     et cetera, et cetera, you really wouldn't know that
 8
 9
     that was actually waste-rock dump.
10
               And all of this is your, you're theorizing
     about what could have happened, not anything that
11
     Molycorp had actually planned. You have never seen
12
13
     any plans that they --
14
               THE COURT: He has already answered that
15
     question.
16
              (By Ms. Kimball) Okay. But you have never
17
     seen anything from Molycorp that shows that they
18
     were planning to do --
19
               THE COURT: He already answered that
20
     question, too. We are going to have to move this
21
     along, so try not to repeat yourself.
22
               MS. KIMBALL: Okay. I'm sorry.
23
              (By Ms. Kimball) Chevron did not own the
24
     land with the state highway on it, correct?
25
               I don't believe so.
0217
 1
               The Forest Service owned that land and
         Ο.
 2
    New Mexico had an easement for that highway?
 3
               I believe so.
               And Chevron would have needed permission
 4
         Q.
 5
     from both the Forest Service and New Mexico in order
 6
     to tunnelize the highway?
 7
               MR. TODD: Objection, Your Honor, calls
     for a legal conclusion. I don't know that
 8
 9
     Dr. Rigby, is here as a -- well, he is not here as
10
     an expert in land use law or state law.
11
               THE COURT: He can say that.
12
               Could you repeat the question then,
         Α.
13
    please.
14
              (By Ms. Kimball) Would Chevron have needed
15
    permission from the Forest Service and the State of
16
    New Mexico to tunnelize the highway?
17
               I don't know, but I would assume possibly,
18
    yes.
19
         Ο.
               And Chevron did not own the river?
20
         Α.
               No.
21
               The State of New Mexico owned the river?
         Q.
22
               I believe.
        Α.
23
               And so they also would have needed
         Q.
24
    permission from the State of New Mexico to tunnelize
25
    the river?
0218
 1
        A. I would assume so.
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```
And as we sit here today you have never
     seen any evidence that they ever broached this issue
     with the State of New Mexico?
               I think, as I indicated earlier, the
 5
        Α.
     project never advanced that far, unfortunately.
 6
 7
              But if they did not have permission to go
 8
     over the river, they never could have done this plan
 9
     either, correct?
10
         Α.
               I would have hoped so, yes.
11
         Q.
               And the State of New Mexico had already
12
     been concerned about the impact the mine was having
13
     on the river, correct?
14
        Α.
               I am not sure.
15
               MS. KIMBALL: Mr. Hambrick, could you pull
16
    up CX209, which has previously been admitted?
17
               THE COURT: What was that again?
18
               MS. KIMBALL:
                             CX209.
19
               THE COURT: Okay.
20
         Q.
               (By Ms. Kimball) Dr. Rigby, this --
               MR. TODD: Your Honor, objection.
21
22
               THE COURT: State your objection.
23
               MR. TODD: I am going to sit back down, if
24
     that's okay, so you can hear me, Your Honor.
25
               THE COURT: I can hardly understand you.
0219
 1
               MR. TODD: I apologize for sitting. Your
 2
    Honor, I gave Ms. Kimball some leeway yesterday in
 3
    raising environmental issues. We do have a
    stipulation dealing with environmental issues.
 5
     is about the third or fourth time that she has asked
 6
     about this with this witness.
 7
               I object to this line of testimony.
     impact to the river has nothing to do with the
 8
 9
     allocation issues, perspective issues before the
10
     Court today. That is for the third phase.
11
               THE COURT: Sustained.
12
               MS. KIMBALL: Your Honor, if I may.
13
    bringing this up only to point out the --
               THE COURT: No. We have a stipulation. I
14
    have got it right here, if you need a copy of it.
15
16
              (By Ms. Kimball) Dr. Rigby, you have never
17
     seen any evidence that Molycorp had discussed the
     impact that the Red River plan would have on the --
18
     that the dump fill itself would have on the river?
19
20
               THE COURT: Counsel, we have been down
21
     that road. Now I want you to move on.
22
              (By Ms. Kimball) Dr. Rigby, you opined
23
     filling the river with waste-rock could have been an
24
     economically superior option, correct?
               Yes.
25
        Α.
0220
 1
         Q.
              And you estimate that the Red River dump
```

- idea would have cost approximately \$2.4 million, correct?
 - A. An indicative cost, yes.
 - Q. And the land exchange cost Chevron approximately \$85,000, correct?
 - A. I believe so.
 - Q. And your estimate for 2.4 million only estimates the cost of the steel for the tunnel, correct?
 - A. It was a cost of culverts based on a quotation from an engineering company for a similar structure which would have been used for another internal waste dump on the erection site on the pit, which is where they erected the shovels and that would require access, maintenance of access for haul trucks.
 - I thought that was a good indicator because that dump would probably have been much higher than what you envisioned in the Red River Valley waste disposal concept.
 - Q. It was only for the steel and the construction materials for the culverts themselves?
- A. It was basically everything for the culvert.

- Q. Did it include the labor for the culvert?
- A. I believe it was an all-in cost.
- Q. And the haulage tunnel that you were basing this on, that wasn't going to be over a public highway, correct?
- A. It was an internal access road used by these enormous haul trucks.
- Q. And a dry haulage culvert doesn't have to accommodate vehicles traveling highways, correct?
- A. Oh, yes, there are certain restrictions on mines in terms of speed limits.
- Q. Right. So there aren't the same -- they are not traveling the same speed as you travel on the highway, correct, as cars travel on the highway?
- A. Well, I think and it is like my earlier response because the concept was flatly refused by the Forest Service, vigorously opposed, I think the term was, that this detail was never really gotten into. And I suspect if it had gone forward, there would have been some additional speed restrictions within the culvert of R38.
- Q. You think the state highway tunnel would have been reduced in speed?
- A. I would say that would have been one consideration.

Q. Okay. But you haven't seen anything from

```
Molycorp evidencing --
               THE COURT: Counsel, he has already
 3
 4
     testified he has seen nothing.
              (By Ms. Kimball) You also opined that the
 5
 6
    Red River plan was technically feasible. Dr. Rigby,
 7
    the tailings pipeline runs along the same route that
 8
    you had planned for the Red River fill plan,
 9
     correct?
10
         Α.
               It does indeed.
11
               MS. KIMBALL: And, Mr. Hambrick, could you
12
     pull up USX373, which has previously been admitted.
13
               (By Ms. Kimball) This shows the route of
14
     the tailings pipeline, correct?
15
               Yes, I believe so.
         Α.
16
               It is running the full length of the mine?
         Q.
17
               MS. KIMBALL: I think there is an issue
18
    with what documents are being pulled up. The Clerk
19
    needs to switch the screen to show from the defense
20
     exhibits.
21
               Thank you.
22
              (By Ms. Kimball) All right. This shows the
23
     tailings pipeline that runs along the mine, correct?
24
               Well, it runs along the southern boundary
25
     of the mine, yes.
0223
               It runs along the river and the highway
 1
     the entire length, right?
 3
               The logical place to locate it.
               MS. KIMBALL: And if we could turn to
 4
 5
    CX432.
 6
               (By Ms. Kimball) This shows your three
         Q.
 7
    markups of the potential valley fill idea, correct?
               Those are three markups, just examples of
 8
9
    what it could look like, certainly not a
10
     recommendation.
11
               THE COURT: Let me interrupt you for a
12
              What has this got to do with anything that
13
     we are dealing with today? Anything?
14
               MS. KIMBALL: Well, Chevron has --
15
               THE COURT: Well, they said that it never
16
    got beyond the discussion and it was quenched right
    away. So why do we even have to get into the
    details? How is it relevant? If you can show me
18
19
    relevance, you can go do it.
20
               MS. KIMBALL: Well, Chevron has asserted
     that the United States is liable for the rock piles
21
22
    because they could have -- there was this
23
     possibility --
24
               THE COURT: That is hardly an issue.
25
               MS. KIMBALL: Okay.
0224
 1
               THE COURT: We are here to allocate based
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upon the fact that the Government is deemed to be a
     potentially responsible party by the Tenth Circuit.
 3
 4
     And we have covered this and covered it and covered
 5
     it. You could cover the river with it, and so I
 6
     would like to move on or we are going to be here for
 7
     months.
 8
               MS. KIMBALL: Thank you, Your Honor.
 9
              (By Ms. Kimball) Dr. Rigby, regardless of
         Q
10
     whether Chevron may have preferred an option other
     than the waste-rock piles that it has already
11
     created, they did, in fact, seek and obtain
12
13
     ownership over their own waste-rock piles, correct?
14
               By way of the land exchange, yes.
15
               And they have had exclusive ownership of
16
     those waste-rock piles for the past 50 years,
17
     correct?
18
        Α.
               '74 to now, almost.
19
         Q.
               So about 50 years?
20
         Α.
               Yes.
21
               MS. KIMBALL: No further questions,
22
     Your Honor.
23
               THE COURT: You may redirect.
24
25
0225
                     REDIRECT EXAMINATION
1
        BY MR. TODD:
               Good morning, Dr. Rigby.
         Q.
 4
         Α.
               Good morning.
 5
               Dr. Rigby, let me start where Ms. Kimball
         Q.
 6
     started yesterday. You were asked some questions
 7
     about acid rock drainage and showed some pictures of
 8
     some yellow water and there was discussion of acid
 9
     rock drainage from there and the rock piles.
10
               Do you recall those questions?
11
         Α.
               I do.
12
               What happens to all of the water that
13
     comes off the rock piles or in either of those
14
     pools?
15
               It is basically collected, treated and
         Α.
16
     discharged.
17
               Now, is the mine the only place in the
18
     valley where acid rock drainage occurs?
19
               No, no.
         Α.
20
         Q.
               Where else does it occur?
               Multiple hydrothermal alteration scars,
21
     which as I mentioned yesterday, during rainfall
23
     events, snow melt, et cetera, et cetera, creates
     erosion flows, which basically flow down the steep
25
     sides of the valley across the R38 and into the Red
0226
    River. So regular occurrence and has been forever.
```

- Have these been known to impact the road 3 and the river?
 - Α. Absolutely.
 - How so? Q.

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- The deadly flows need to be cleared, so Α. the R38 is closed while the authorities clear the debris, and it basically, because of the acid generating nature of the material, it clearly reduces the pH in the Red River and turns the Red River red, plus turbidity.
- Now in the 1960s and 1970s when the waste-rock piles were being created, are you aware of the Government ever objecting to the waste-rock piles as being a source of potential acid rock drainage?
 - Α.
- Q. What is your understanding of what the Forest Service issue was of the waste-rock piles?
- I believe they viewed the waste-rock piles favorably or positively because they reduced -- they basically sealed existing hydrothermal scars in that location and inhibited ARD from that material.
- 24 MR. TODD: Could we turn, Patty, please to 25 Chevron Exhibit 281, Page 5. 0227

1 Let's go to the next page, please. 2

And highlight the third paragraph down under Section 3, starting, "There are several."

- (By Mr. Todd) Dr. Rigby, this is the Q. Forest Service's environmental assessment and justification of a land exchange, so justifying giving land to Molycorp for waste rock disposal?
 - Α. Yes.
- How did the Forest Service deal or view the waste-rock piles here?
- As I said, positively, but it reduced this 11 Α. 12 impact.
 - Let's move on. You were asked lots of Q. questions about Molycorp's exploration program at Questa in 1954 to 1956, so prior to the DMEA loan. Do you recall that?
 - Α. I do.
 - Now the Government has asserted that Molycorp in those years was using diamond drilling to search for a low grade ore body. I take it the answers on cross yesterday that you disagree with both of propositions?
 - Α. Correct.
- 24 Let's start with drilling. The Government Q. 25 on cross with both witnesses yesterday extolled 0228
 - Mr. John Schilling as an expert regarding the Questa

```
Mine in the 1950s.
 3
               Do you recall that?
 4
         Α.
               I do.
 5
               Do you agree with that assessment of
         Ο.
 6
     Mr. Schilling's expertise?
 7
               A very, very capable exploration
 8
     geologist, yes.
 9
               And very familiar with the mine?
         Q.
10
         Α.
               Indeed.
               MR. TODD: Let's pull up CX043, the 1956
11
     Schilling report, please. Let's please turn to
12
13
     Page 8 to 9 of the report, which is starting at
     Page 22 of 104.
14
15
               (By Mr. Todd) Dr. Rigby, how does
16
     Mr. Schilling -- what exploration methods does
17
     Mr. Schilling report as of 1956 that Molycorp was
     using or not using at the Questa Mine?
18
19
               Basically underground exploration is
20
     carried on by drifting and raising among the veins,
21
     crosscutting where appropriate and, as he says,
22
     diamond drilling is not used.
23
         Q.
               If diamond drilling had been used at
24
     Questa?
25
         Α.
               He would have known.
0229
               He would have known?
 1
         Ο.
 2
         Α.
               Indeed.
 3
               MR. TODD: Let's pull up CX054.
               (By Mr. Todd) And this, Dr. Rigby, to
 4
 5
     move us along, is the DMEA field team's Final Joint
 6
     Geological and Mine Drilling report.
 7
               Yes.
         Α.
 8
         Q.
               What was the purpose of this document?
9
               It was basically a first opinion on, or an
10
     assessment of what Molycorp was proposing in support
11
     of their application for a DMEA funding.
12
         Q.
               And it is dated April 2, 1957.
13
               Do you see that?
14
         Α.
               Yes.
15
         Q.
               This is another contemporaneous account of
16
     what was at the mine?
17
               Indeed.
         Α.
18
               Would the field team have inspected the
19
     mine in person?
20
         Α.
               Yes.
21
               As well as reviewing documentation?
         Q.
22
         Α.
               Correct.
23
               How comprehensive of a review in your
         Q.
24
     understanding would the field team had taken?
25
               I think, as I alluded to yesterday, really
         Α.
0230
     to me it was the expertise experience and capability
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of the geologists and engineers within the DMEA, the USGS and the Bureau of Mines that had tremendous, I think, impact on this program because they took their jobs very, very seriously and they did, to me, a very detailed assessment of, A, what was being proposed in the context of the geological environment and the geological understanding which existed at the time for the Questa Mine.
```

MR. TODD: Let's turn to Page 6, which is 16 of 54.

- Q. (By Mr. Todd) Dr. Rigby, what exploration methods did the DMEA field team in 1957 report were used or not used at the Questa Mine?
- A. Well, basically drifts and crosscuts. As you can see, no diamond drilling has been done. And basically assay records have not been kept or are not available. And this is fundamental information that you must have at a mine or certainly for geological evaluation.
- Q. You stressed the importance of sampling and assaying yesterday in response to a question from Ms. Kimball. What sorts of sampling was Molycorp using pre-DMEA?
- A. Because it was looking for high grade 0231

veins, high grade veins are clearly visible once you intersect them, and therefore they didn't really need, you know, comprehensive sampling. But, and I think what I was aware of was that apparently they occasionally take grab samples from all cuts as they are coming out of the mine.

Well, the problem of that is where exactly did that sample come from? That sample is very good for that sample in terms of the limited content, but you don't know in three-dimensional space where it actually came from, so it is not particularly helpful.

- Q. You mentioned in your testimony some other types of samples, knot samples and channel samples?
- A. Knot samples, channel samples and indeed in diamond drilling you actually get a core, you composite sections of that core, assay that core, so you get a specific location and grade of that sample, which is critical especially when you are looking for low grade deposits.
- Q. Now the Government yesterday showed USX003, which was an SEC filing from 1964, which stated that there was diamond drilling and searching for low grade ore as of 1954.

25 Based on the materials you have just seen 0232

that is not correct. If Molycorp was not using

```
exploratory drilling or representative sampling
prior to 1956, is it possible at all in your
experience and your expertise that that they were
searching for a low grade ore body?
```

I don't believe so, no.

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- Q. What sort of ore was Molycorp exploring for prior to the DMEA program?
- What they always explored for, which was high grade vein system that would support their operations as they had done since 1921.

MR. TODD: Let's pull up Mr. Schilling's report again, CX43.

(By Mr. Todd) The Government asserts that Molycorp's DMEA application was driven in part by Mr. Schilling's discussion of low grade ore at Questa.

Do you agree with that?

- Well, if it was I would have thought that they would have appended Mr. Schilling's geological assessment to their application, but they didn't.
- And during Mr. Dewey's testimony we heard that Mr. Schilling did identify low grade mineralization at Questa but concluded that what was known at that point wasn't commercially viable. 0233

Do you recall that?

- Α. That's right, they were not large enough. MR. TODD: Let's turn to Page 92, please, of this report.
- (By Mr. Todd) Looking at the top of the paragraph here, the highlighted text, what did Mr. Schilling say had to happen first before one could know whether there was commercially viable low grade ore at Questa?
- Α. It would need a detail study of grade and tonnage to establish economic value like any mine.
 - And what would such a study entail?
- A large amount of drilling, bulk sampling, Α. as a precursor to scoping study, a pre-feasibility study and a final feasibility study. A lot of hard work to basically underwrite an investment and development decision once you have demonstrated economic value. Serious business it is.
- Are you aware of any evidence suggesting that any of that work had been done prior to the DMEA's involvement?
 - Α. Not at all.
 - Who first suggested such a program? Q.
- 24 Α. The DMEA.
- 25 Did Molycorp rely on Dr. Schilling's Q. 0234
 - findings at all when it submitted its DMEA proposal?

- I wasn't there, so I can't say, but there 3 is certainly nothing in the record to suggest that.
 - Whose reports did Molycorp rely on and attach to its application?
 - Two reports from Carpenter dated '54 and Α. '56.
 - Now Mr. Carpenter's '56 report, at least, does mention low grade mineralization at Questa. Did he anywhere recommend a program to go delineate it and explore for it?
 - Certainly not in that report. Α.
 - What did he recommend? Ο.
 - Α. Continuing more of the same, looking for the contact where they believe they may find high grade vein systems.
 - When you say the contact, can you Q. describe?
 - Α. It just says basically the contact between the volcanics and the country rock. You climb up the volcanics where you end up with sheers and fractures and so on, which hopefully hold some mineralization.
- 24 The Government also noted that 25 Mr. Carpenter in '56 noted diamond drilling. Did he 0235
 - recommend that diamond core drilling be used to search for low grade ore?
 - I don't believe so. That reference, which I checked, I believe it is a quicker way of reaching the contact and that was the purpose of that diamond drilling reference.
 - Okay. So to sum up, in December of 1956 when Molycorp applied for a loan, as the Government demonstrated yesterday, Molycorp knew of low grade mineralization at Questa, knew about diamond drilling and knew that a study of grade and tonnage using drilling and sampling could show if the ore's commercial. Knowing all of that, what did Molycorp propose to do to the DMEA?
 - More crosscutting and drifting which could Α. only be directed at exploring for more high grade vein systems.
 - Q. Any drilling?
 - Α. No.
 - Q. Any sampling?
 - Α.
- During the negotiations over the contract, Q. as you testified a minute ago, it was the DMEA that suggested using drilling and sampling and engaging in the studies to look for low grade ore; is that 0236
- 1 right?

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Yes. Α.

Q. How would you characterize Molycorp's reaction to the Government's proposal that it do these things?

If I can use my own words, I think they were very negative. I mean, look, you are applying to the DMEA for a loan to support exploration. don't want to get acrimonious, but they clearly resisted the suggestion for diamond drilling, systematic sampling and so on, and so forth.

That was one of the internal memos or letters from the DMEA stated, you know, a lot of what they were proposing was just not supportable. It wasn't supported by geological knowledge or even geological hypothesis. And as one of the references was, it is more like prospecting that exploring and certainly the DMEA wasn't set up to fund prospecting.

Ο. Let me change gears now. You were asked a lot of questions about the importance of the DMEA or whether the DMEA was important to the development of the Questa mine.

Do you recall those?

I do. Α.

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- In your expert opinion, Dr. Rigby, could Molycorp have discovered and delineated and exploited the low grade ore body without the DMEA's technical and financial involvement?
- I think I said in my report, highly unlikely.
 - Let's talk about the execution of the program. We have already talked about the contract negotiation.

How valuable, in your opinion, was the DMEA's technical assistance during the execution of the program?

Very valuable. I mean, you know, they Α. would -- again in my report I think I used the term hands-on. They were very much hands-on. This is an important exploration program which had to be executed as designed or as developed, but it needed close oversight because the thing about an exploration program is you don't do it with blinkers on.

In other words, you embark on an exploration program and you are learning from every day. You are learning from every drill hole and you think, oh, we don't know that. That now changes our thinking. So we modify maybe the next drill hole to 0238

1 maximize the benefit.

These are expensive drill holes, so you are eking out every little bit of geological knowledge to increase your understanding, and modifying the program as you go. That is why it was important for the oversight of highly experienced people.

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- Did the DMEA provide any assistance or guidance with respect to assaying?
- Yes, they did. I mean, that was agreed in the report and specification for assaying composite samples of core channel sampling along the drifts and crosscuts. And the, I think two examples of requests. I think one which was denied and the other one which was approved.

One was a request to dispense with channel sampling and just have an occasional wall sample. The interpretation of the justification of the request was, it was bogus and therefore it was denied.

The other one that was approved was, you know, because of the broken nature of a lot of the ground, diamond drilling is difficult. And the problem in diamond drilling in poor ground is that core recovery is low. You know, and they had some

very, very low examples of core recovery.

The problem with low core recovery is did we lose mineralization or did we lose waste. don't know. So the company requested that in background, they be allowed to take sludge samples which is basically the sludge that comes back out of the hole from the drilling. It is not as good but it is certainly better than nothing. That was approved.

- Q. How about discovering errors in assaying?
- Apparently that did happen. I don't think Α. we ever got to the bottom of why, but partway through the program, I think it was probably late '58, maybe '59, it was discovered that for whatever reason assay results have been overstated by a factor of two and basically we had to be cut in half 50 percent of the reported value. That was a bit of a blow.
 - Who discovered that error? Ο.
- I am not sure who actually discovered it. I am not sure if it was DMEA. The fact is, it doesn't matter, it happened.
- The Government noted that Molycorp dug more feet of tunnel on its own account than were duq using DMEA funding. 0240

1 Do you recall that?

```
Α.
               I do.
 3
         Q.
               Have you reviewed a Molycorp tunnel on its
 4
     own?
 5
               I have.
        Α.
 6
               And where and what is your assessment of
         Q.
 7
     that?
 8
               I think there are two dimensions to what
        Α.
 9
     they did themselves. One really resulted in
     nothing, which was probably, I am quessing
10
     4,000 feet or I think they did, in total, in
11
12
     addition to what was done in the contract about
13
     5,900 feet.
14
               A lot of that was, I believe, to the
15
     south, so the southwest and to the west looking for
16
     high grade veins on their own, and I believe they
17
     were unsuccessful.
18
               But also some of that was, number one,
19
     crosscut north, which was ultimately, let's say, and
20
     certainly drifts off that crosscut part of the DMEA
21
     program. I think that was -- that was good, let's
22
     say good development to access an area which would
23
     subsequently be proven to be from an exploration
24
     perspective highly successful.
25
               The discovery at the end that you
0241
     mentioned there, was that Molycorp work or jointly
 1
 2
     funded work?
 3
               Jointly funded work.
        Α.
               MR. TODD: Let's pull up CX107, which is
 4
 5
     Molycorp's final report on the DMEA program. We saw
 6
     this yesterday. And let's turn to Page 4, which is
 7
     6 of 9 in the exhibit.
 8
               (By Mr. Todd) At the bottom of the page
         Q.
 9
     here, Dr. Rigby, it provides a summary of all of the
10
     drifting, crosscutting and drilling that was done
11
     during the program.
12
               Do you see that?
13
               I do.
         Α.
14
               Did Molycorp do any drilling on its own
         Q.
15
     account?
16
         Α.
               I don't believe so.
17
               So if we include exploration by drilling,
         Q.
     who covered more square feet, Molycorp on its own or
18
19
     the DMEA funded work?
20
         Α.
               Yeah, the DMEA funded work, clearly.
               There was 21,417 feet of drilling?
21
         Q.
22
         Α.
               Yes.
23
               Thank you.
         Q.
```

capital raising yesterday.

24

25

0242

asked a lot of questions about bank borrowing and

Let's move on to finances. Ms. Kimball

Do you recall those questions?

A. I do.

- Q. In your expert opinion, sir, would Molycorp have been able to raise funds to explore and develop the low grade ore body at Questa without the DMEA's finance or involvement?
- A. I don't believe so because providers of finance have to have a reason, have to have -- when you are applying for finance associated with mining, you have to have a good argument. There has to be an expectation of success, there has to be evidence. The investors and banks and so on are no fools. They have their own people with expertise in the sector, and, you know, they will do thorough assessment in their due diligence before providing funding.

So you have to get your ducks in a row before you approach financiers.

Q. Ms. Kimball noted that in '54 and '55, Molycorp was able to raise about \$3 million.

Do you recall that?

- A. I believe so.
- Q. Would Molycorp's financial position in 1955 be relevant to whether it could explore for ore

in 1957 at Questa?

A. I think I mentioned that yesterday as well, using, I think it was the prospectus for the raising in '57 or there was a summary of basically balance sheets for the previous five or six years. The numbers range, basically what was available in income plus or less special factors ranged from about 500,000 to a million.

But that is not just Questa, that is Molycorp Corporation with all of their other assets as well. So there wasn't a lot left to support excavation at Questa and certainly not for searching for large low grade orbity.

- Q. And despite having raised the fund that the Government pointed to, by the time of the DMEA application in December of '56, did Molycorp have an exploration planned at Questa?
- A. It states in the application that no further exploration plans were available. They had no plans for further exploration.
- Q. What impact did the signing of the DMEA contract have on Molycorp's ability to raise funding specifically for exploration of Questa in '57?
- A. As I said earlier, from an investor perspective, you know, any good news can often be
- 1 leveraged and that's exactly what Molycorp did. In

- 1957, soon after their contract was signed, Molycorp basically went to the market and raised funds and attached the signed contract to that application.
- Q. And what impacts did the Government's certification of a discovery at Questa in 1961 have on Molycorp's ability to raise funds to explore and delineate the ore body at Questa?
- A. Exactly the same, because now you have an even stronger story to tell to the market, not just that you have an exploration in place with the DMEA, but now in '60 the certification, that that resulted in a discovery of a large low grade ore body, which would be in the whole objective of the exploration program in the first place. And Molycorp quite rightly got into that for the market in further raising.
- Q. Last question on finances. The Government has pointed out repeatedly, and correctly, that Molycorp spent a lot more on its own account over the years, so '57 to '64, a lot more than the DMEA contributed to the exploration program. You agree with that, right?
 - A. You mean post-'60?
- Q. I am including the money that Molycorp 0245

spent on its own '57 to '60.

A. Yeah.

- Q. And then from '60 to '64 many millions more, right?
 - A. Yes.
- Q. Okay. Given that, and that's correct, but given that, Dr. Rigby, what is your view of the role of the DMEA's contribution to that initial exploration program? How do you characterize those funds?
- A. I would definitely characterize it as seed capital or seed funding, which achieved its objective. It identified the ore body and that is the discovery holes which are so critical to any, you know, any new deposit, any new project. That really is the most important time in the life, but that's when the real work starts.

And as I have mentioned earlier, you have got a huge amount of work to do to raise the knowledge base and the certainty to have pretty definitive cash flow projections to support a development decision and investment commitment.

- Q. Shifting gears again, Dr. Rigby, you were asked a lot of questions yesterday about the relationship between the DMEA exploration area
- l underground and the open pit mine on the surface.

Do you recall that?

```
3
               I do.
         Α.
 4
         Ο.
               And the suggestion was that these were
 5
     different, separate, unconnected.
 6
               Do you recall that?
 7
         Α.
               I do.
 8
               MR. TODD: I will take a little time with
 9
     this, Your Honor. I think it is important to walk
10
     through this carefully and geologically. I will do
11
     this as quickly as I can.
12
               THE COURT: Slow down just a little.
13
               MR. TODD: Yes, Your Honor.
14
              (By Mr. Todd) Dr. Rigby, let me start with
15
     this. The three different mining operations at
16
     Questa, two underground mines, one open pit, did
17
     they develop different ore bodies?
18
               Well, I don't believe so.
                                          It's basically
19
     one contiquous continuous, but contiquous is a
20
     geological term, large horseshoe-shaped ore body.
21
               There are lots of references in the
22
     documents to the northeast zone and the southwest
23
     zone. What does that mean? What are those?
24
               Those are two zones within that large
25
     horseshoe-shaped mineral, area of mineralization
0247
    which had elevated molybdenum grades, hence the
 1
 2
    northeast and the southwest.
 3
              Did DMEA's funded exploration occur in
        Q.
 4
    both?
 5
               To a degree, yes.
        Α.
 6
         Ο.
               And what exploration occurred in the
 7
    northeast zone?
 8
               They, I think the emphasis shifted and
9
     certainly towards the latter part of the contract,
10
     the emphasis certainly focused on the northeast zone
11
     as a result of, you know, of intersecting
12
     mineralization.
13
               We saw a minute ago yesterday that
         Q.
14
    Molycorp's final report to the DMEA.
15
               MR. TODD: Could we pull up CX107, again
16
     and let's go to Page 9 of 9 and let's highlight the
17
     three blocks, please.
18
              (By Mr. Todd) Just to orient us,
19
    Dr. Rigby, this was mentioned yesterday. What did
20
    Molycorp report discovering through the DMEA funded
21
     exploration?
22
               From the results of the exploration
         Α.
23
     analysis of the assays, the drill logs and so on,
24
     they delineated three ore blocks, three distinct ore
25
    blocks; Block 1, Block 2 and Block 3.
0248
 1
               Block 3 was certainly in the northeast
```

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zone.
 3
               And have you seen these plotted on maps?
        Q.
 4
        Α.
               I have.
 5
               MR. TODD: Could we pull up CX211, please.
 6
               (By Mr. Todd) This is a mineral
     examiner's report from 1969 prepared by a gentleman
 7
     named Harb Ashby; is that right?
 8
 9
               It is.
        Α.
10
               MR. TODD: Could we turn to Page 20 of 23,
     please.
11
12
               (By Mr. Todd) To move us along,
         Ο.
13
     Dr. Rigby, do these maps plot where the three ore
14
    blocks were?
15
               Yes, you can see them sort of dotted three
         Α.
16
    blocks.
17
               And so that's the pixillation?
         Q.
               The pixilation, that is the word I was
18
         Α.
19
     looking for.
20
         Ο.
               And what, we see reference to Summit 4,
21
     Lonesome Limited, Summit 5?
22
         Α.
               Those are the claims.
23
         Q.
               Mining claims?
24
         A.
               Mining claims, yes.
25
         Q.
               On the surface?
0249
               Patented claims on the surface.
         Α.
 1
         Q.
               And do you generally agree with the
 3
     location of these ore blocks?
               I do. I believe that is Block 3, isn't
 4
 5
     it?
 6
         Q.
               That's correct, sir.
 7
         Α.
               Did the DMEA similarly prepare a final
 8
         Q.
9
     report?
10
        Α.
               Yes.
               MR. TODD: Let's pull up CX108.
11
12
         Q.
               (By Mr. Todd) And is this the DMEA's
13
     final report?
14
         Α.
               It is.
15
               MR. TODD: Could we go to Page 15 of 17,
16
              And let's highlight the final paragraph or
     please.
     blow it up, please.
               (By Mr. Todd) What did the DMEA report
18
19
     about the jointly-funded exploration discover?
20
        Α.
               Well, you want me to read that?
               You can paraphrase it.
21
22
         Α.
               It is a large block. They concurred or
23
     concluded that there was inferred reserves. Let's
     not go into detail on that terminology, but they
25
     believed about 2.5 billion tons of molybdenum
0250
 1
    bearing rock containing better than .2 percent
```

molybdenite or molybdenum disulfide. Within that huge mass, there were two blocks of commercial grade .5 percent and within those they estimated 10 million tons each or thereabouts.

And again, Number 1 Crosscut North, which is particularly relevant to Block 3.

- Q. And what does commercial grade mean?
- A. Well, commercial grade indicates that you can mine it for a profit. It indicates, you know, all of the evaluation work is to follow, but people have a feel for what cutoff grade, which is the breakeven grade above which you make money, below which you lose money.

And hence they believed because of that grade and I think ultimately the cutoff grade for the open pit was about .15 percent, so if you are mining .5 percent you are making a profit.

- Q. Dr. Rigby, is it possible to relate these blocks and zones that we have seen in these reports to mining claims and the location of the open pit on the surface?
 - A. Yes. By overlaying various plans.
- Q. I thought you would say that. I am going to give you the materials to do that.
 - A. Thank you.

 MR. TODD: Could we pull up CX109, please. Could we highlight the legends at the top and the bottom so Dr. Rigby can see them.

- A. That is better.
- Q. (By Mr. Todd) Could you tell the Court what this map from 1960 depicts?
- A. Okay. It is a plan of the second tunnel shelf level showing the exploration under the DMEA contract. And I think the most important -- can you just raise the top a little bit or pull the whole thing down? Well, the most important --
- Q. Let me ask you this, Dr. Rigby. In the top left do you see who prepared this map?
- A. USGS.

16 MR. TODD: We can get rid of the top call 17 out.

- A. The most important thing there from a -in terms of the exploration success is, number one,
 Crosscut North, right in the middle of that figure,
 and you can see it is going north. I don't want to
 put my finger on it and draw on it because I will
 ruin the diagram.
- Q. (By Mr. Todd) I can clear it if you would like.
 - 1 A. Okay. Number 1 Crosscut North. What

```
happened with that and that was -- that was
     developed by Molycorp on its own, I understand. And
 3
 4
     probably the latter or the last 2 to 300 feet of
 5
     that Number 1 Crosscut North, that is less than
 6
     that, it is probably about there (indicating),
 7
     started to intercept pretty good grade, I think .5
 8
     on average.
 9
               There were assays of .7 percent moly, that
10
     was, you know, very encouraging. And then within
     the DMEA contract and they agreed that -- the DMEA
11
     agreed that they would support as part of the
12
13
     program Number 4 Drift West, which is to the left
14
     shown in red and from a Number 3 Drift East, which
15
     is also shown in red. That is 4 Drift West, 3 Drift
16
     East.
17
               And what is the implication of the tunnels
18
     there in red on this map?
19
               They were basically jointly funded, DMEA
     and Molycorp. And from Number 3 Drift East, drill
20
     holes, diamond drills holes upwards were drilled and
21
22
     from Number 4 Drift West, diamond drill holes
23
     downwards were drilled and both intersected good
24
     grade mineralization.
25
               MR. TODD: Let me call up CX110, please.
0253
 1
               (By Mr. Todd) CX110, Dr. Rigby, is the
 2
     same as CX19 except there are some handwritten
 3
     notations.
               Do you see those?
 5
         Α.
               I do.
 6
               What is your understanding of what those
         Q.
 7
     depict?
               I think those are handwritten notations
 8
         Α.
 9
     from Dr. Quivik, I believe, indicating the edges of
10
     blocks.
11
               It says OME1 and OME2, and we will confirm
         Q.
12
     this later, but they represent the locations of the
13
     two commercial ore blocks, okay?
14
         Α.
               Yeah.
               Is that your understanding?
15
         Q.
16
         Α.
17
               And do you generally agree with the
         Q.
18
     location of those?
19
               Without doing a detail analysis, they look
         Α.
20
     reasonable.
21
         Q.
               One last document to show you for the
22
     overlay.
23
               MR. TODD: Could we pull up CX47, Page 13,
24
     I think, it is.
               (By Mr. Todd) And, Dr. Rigby, this is a
25
0254
```

1958 map, and what does this combine?

This is basically Molycorp's patented 3 claims at the time on surface. 4 What do you see overlaid on it in the Q. 5 middle? 6 Is that the -- I don't see it yet. Are we Α. 7 overlaying the second? 8 It is difficult to see, but if you look in 9 the middle of this you will see the 1958 second 10 level tunnel --11 And can we see the ore blocks? 12 Ο. In a minute. 13 Α. Okay. 14 I know that you have looked at this not on Q. 15 the screen. Is it your understanding that the 16 tunnel system in the middle of the picture is the 17 1958 second level --18 Α. Yeah, because you basically superimpose 19 overlaying. So we have got the surface claim locations, you have got the underground development 20 21 on the second tunnel, the second level tunnel shelf. 22 MR. TODD: Could we overlay CX47, CX110 23 and CX211. Can we zoom in on the area with the 24 pixillation and OME2. 25 (By Mr. Todd) And, Dr. Rigby, what does Q. 0255 this show you about the Molycorp reported ore blocks 1 2 and the DMEA reported ore zones? 3 Well, I think we see three things. basically that successful exploration with the up 4 5 and downholes in the northeast zone from the 6 development and drilling. 7 Then the delineation and certification of the ore blocks patented, the surface claims 8 9 10 11

Then the delineation and certification of the ore blocks patented, the surface claims specifically Summit 4, Summit 5 and Lonesome are all pretty much coincident. It is the same, in the area and the beauty -- and then they discovered this from an analysis that Harb Ashby and mineral examination report where he, when he looks at -- when he visited the mine or the site and walked the surface, identified where the claims were and then gave a written description of activities that were occurring at the time, and that was in 1969.

He refers to ore mining taking place on the -- in the eastern part of Lonesome.

Stripping of overburden taking place for the rest of Lonesome and stripping of overburden

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taking place on Summit 4 and 5.

So that is telling me that this area that you just circled was within the open pit.

you just circled was within the open pit.

Now, Ms. Kimball, yesterday, made the
Kimball

point that the DMEA workings, the discovery that we

```
just saw, was lower than the open pit?
 3
               Yes, which is why you used up-drill holes
 4
     drilled vertically upward.
 5
               And your response several times was but it
 6
    is the same ore body?
 7
               The same ore body, absolutely.
 8
               Yesterday you were very, very eager to
 9
    draw something on the white board over there?
10
               I was.
              And you weren't allowed to, yesterday?
11
         Q.
12
         Α.
              No.
13
         Q.
               Okay.
14
               MR. TODD: Your Honor, after testimony
15
    yesterday, I didn't discuss Mr. Rigby's testimony
16
    with him, but to save time today I didn't want him
17
    drawing in court to move us along, so I invited him
    to come early this morning and to draw whatever he
18
19
    wanted. He has drawn something on that board, I
20
    haven't seen it, I haven't discussed it with him,
21
    but I would like to let him describe what he wanted
22
    to say yesterday if that is okay?
23
               THE COURT: Any objection?
24
               MS. KIMBALL: No.
25
               THE COURT: No objection, you may.
0257
              MR. TODD: May I approach, Your Honor?
 1
               So this is basically a plan view of the
        Α.
    northeast zone. This is -- we have already seen
    these and the two previous diagrams. So this is the
 5
    Number 1 Crosscut North, that is Number 3 Drift
 6
    East, and this is the Number 4 Drift West.
 7
               And these are the locations, approximate
     locations of the diamond drill holes. These were
 8
 9
     drilled up and these were drilled down (indicating).
10
     And I think the -- only one more?
11
               The second diagram is a section looking
12
    north. If you imagine the Number 1 Crosscut is
13
     going in this direction due north and the last 2 to
14
     300 feet intersected reasonably high grade
15
    mineralization?
16
               This is Number 3 Drift East, from which
17
    drill holes were drilled upwards intersecting the
    mineralization. This is, if you can imagine, this
18
19
    is Number 4 Drift West, but it is sort of drilled
20
    here, right? Downholes intersected the
21
    mineralization. So this was the mineralization in
22
    the northeast zone.
23
               The geologists believe -- this is the
24
     existing topography, Sulphur Gulch, and this is the
25
    mountain. They believed originally the
0258
 1
    mineralization went all the way but it was eroded
```

over geological time.

And to me this demonstrates more than plans and so on, how awry the mineralization was first discovered then delineated with exploration program funded partly by the DMEA.

I think that puts it in simple terms and the open pit ultimately, I mean it is not perfect in terms of scaling and what have you, but the open pit was around here (indicating).

MR. TODD: Your Honor, could we mark these as Chevron Demonstrative 4 and 5?

 $$\operatorname{THE}$ COURT: Yes, please. Go ahead and mark them on the paper.

(Exhibit marked, Chevron Demonstrative 4 and 5.)

- Q. (By Mr. Todd) Dr. Rigby, final question. Once this discovery was made underground as part of the DMEA program, what did Molycorp then do to get to the open pit?
- A. Oh, well, that was in 1960 when the discovery was certified and almost immediately they, they started work.
- '61 they raised additional funds and those additional funds really was for further exploration 0259

and definition drilling, infill drilling, and a huge amount of work which culminated in the finalization and publication of the feasibility study in 1964.

And that work, it was, it started with exploration to get high resolution of the grade distribution and better understanding of the edges and the variability of the mineralization, but then it shifted to some serious open pit design work and then a huge amount of metallurgical test work. Because, you know, they only had a 50-ton per day mill. We ended up with eight, in '65, an 8,000-ton per day operation.

And so they had to make sure that they had done sufficient test work metallurgical test work on both samples and pilot plant test work to ensure that they had the right process flow sheet which would optimize the recovery of the molybdenite concentrate.

- Q. And in your expert opinion would any of that have been done without the original DMEA discovery?
 - A. In my expert opinion, absolutely not.
- Q. Last topic, Dr. Rigby, the Red River
 Valley fill concept. I am not going to ask you any
 questions about the design or hypotheticals. His
 0260
- 1 Honor has moved us on from that. Let me just ask

```
you this: The Government has suggested that
 3
    Molycorp was not really serious about the valley
 4
     fill concept, that it was just something that was
     just tossed out casually at one meeting and wasn't
 5
 6
     really a thing.
 7
               In your expert opinion, was this a serious
 8
    proposal addressing a serious need for Molycorp?
 9
               Undoubtedly, yes, it was a critical need,
10
     not just serious, it was critical at that time.
11
         Q.
               And what are your bases for believing
12
     that?
13
               Well, information that I have read but
         Α.
14
     also conversations that I have had with Dave
15
     Shoemaker, Gene Dewey and John Landreth. And the
16
     document in 1972 which looks forward of the next,
17
     four, five, six years in terms of mine planning and
18
     clearly can be seen on one of the pages in that
19
     document, there is still talk about the bridge waste
20
     dump, and the south side waste-rock piles, which is
     on the south side of the river.
21
22
               MR. TODD: Could we pull up CX, I am going
23
     to guess, 282. Could we go to Page 18.
24
               (By Mr. Todd) Are these the dumps you are
25
     referring to?
0261
 1
         Α.
               Absolutely.
 2
               MR. TODD: If we could highlight the
 3
    possible future dumps.
 4
               (By Mr. Todd) What is your understanding
 5
    of Sector 1, Sector 2 and Sector 3?
 6
               Basically these are all north. A, are
 7
    basically north dumps, and B are pretty much south
     dumps. And we can see three, well, four references
 8
9
     Sector 1 south, south side Red River, 2, south,
10
     same. Sector 3, the same, and then a bridge filled
11
     axis across Red River requires tunnel through.
12
     is how you get access to the south side for waste
13
     disposal.
14
               Is it understanding, Doctor, and have you
15
     formed an opinion that this is the same valley fill
16
     concept Molycorp proposed to the Forest Service in
17
     1969?
18
               It can only be the same.
         Α.
19
               MR. TODD: No further questions,
20
    Your Honor.
21
               THE COURT: You may step down.
22
               (Whereupon, the witness was excused.)
23
               THE COURT: You may call your next
24
    witness.
25
               We have a mechanical issue and so we are
0262
    going to take about a five-minute break and see if
```

```
we can get it resolved.
 3
               (A recess was taken.)
 4
               THE COURT: We can proceed.
 5
               MR. HOPSON: Chevron calls Dave Fredley.
 6
               THE COURT: Thank you.
 7
               (Whereupon, the witness was sworn.)
 8
               THE COURT: You may proceed.
 9
               THE COURT REPORTER: Would you please
10
     state and spell your last name for the record?
11
               THE WITNESS: My name is David C. Fredley,
12
     F-R-E-D-L-E-Y.
13
               MR. HOPSON: Mr. Fredley, did you submit
14
     written direct testimony in this case?
15
               THE WITNESS: Yes, sir.
16
               MR. HOPSON: Did you prepare that
17
     testimony?
18
               THE WITNESS: Yes, sir.
19
               MR. HOPSON: Is that testimony true and
20
     correct today, to the best of your knowledge?
21
               THE WITNESS: Yes, sir.
               MR. HOPSON: We tender his testimony,
22
23
     Your Honor.
24
               THE COURT: Thank you. It will be
25
    admitted.
0263
               (Mr. David Fredley's direct testimony was
 1
 2
    prefiled and admitted.)
 3
               THE COURT: Counsel, you may proceed.
               And tell me your name again.
 4
 5
               MR. HARRISON: Good morning, Your Honor.
 6
               Bryan Harrison.
 7
               THE COURT: Okay. Thank you,
 8
    Mr. Harrison.
9
                       CROSS-EXAMINATION
        BY MR. HARRISON:
10
11
         Q. Good morning, Mr. Fredley.
12
               Good morning, Mr. Harrison.
13
               You worked for the Bureau of Land
         Q.
14
    Management and then the Forest Service as part of
15
    your professional career; is that correct?
16
        Α.
               Yes.
17
         Q.
               Forest Service is part of the Department
18
    of Agriculture?
19
               That is correct.
         Α.
20
         Q.
               And BLM is part of the Department of
21
     Interior?
22
        Α.
               Yes.
23
               You would agree that both of these
         Q.
    agencies work to serve the public interest, correct?
24
25
               Would you repeat that?
        Α.
0264
 1
         Q.
             Both of these agencies work to serve the
```

```
public interest?
 3
         Α.
               Absolutely.
 4
         Ο.
               And based on your experience with both,
     you would agree that Federal agencies must comply
 5
 6
     with laws and regulations?
 7
         Α.
               Yes, and they write regulations.
 8
               And they aren't to provide special
 9
     treatment to any one individual or company?
10
               I wouldn't think so.
         Α.
11
         Q.
               And oftentimes, agency decisions must
12
     balance a broad range of competing interests?
13
         A.
               For sure.
14
         Q.
               Chevron is a for-profit company, correct?
         A. I assume they are.
Q. And Chevron's corporate predecessor,

""" as well?
15
16
17
    Molycorp, is a for-profit company, as well?
18
         Α.
               I would assume so.
19
         Q.
               And their primary purpose is to make as
20
    much money as possible for shareholders, correct?
21
               I think that is one of the goals of
         Α.
22
    companies.
23
         Q.
               The Forest Service does not share that
24
     same mission or goal, correct?
25
               To make money for a company?
0265
 1
         Q. Correct.
 2
         A.
               No.
 3
         Q.
               Neither does BLM?
 4
         Α.
               That is correct.
 5
               You never worked for either BLM or the
         Q.
    Forest Service in New Mexico?
 6
 7
         A.
               No, I did not.
 8
         Q.
               And when you worked for both, none of your
9
     responsibilities involved the Ouesta Mine?
10
               That is correct.
11
               And none of your responsibilities would
12
     either involve the Defense Minerals Exploration
13
     Administration or DMEA?
14
               That is true.
         Α.
15
               In your testimony, you were not providing
         Q.
16
     legal interpretations of the mining laws, correct?
17
               I am providing an expert on what I believe
     the mining law states.
18
19
               But you are not a lawyer, correct?
         Ο.
20
         Α.
               I am not a lawyer, for sure.
21
               And you've never published a treatise on
         Q.
22
     mining laws?
23
               No, I have not.
         Α.
24
               Throughout your testimony, you repeat a
         Ο.
25
    phrase that, "United States was the paramount
0266
    proprietor of the Questa site."
```

```
Do you recall that?
 3
         Α.
               I do.
 4
         Ο.
               And you took this term from a 1914
     treatise by Curtis Lindley?
 5
 6
               That's correct.
         Α.
 7
         Q.
               You would consider his treatise as a
 8
     leading authority on mining or mining law?
 9
               Absolutely.
         Α.
10
         Q.
               And Mr. Lindley was a preeminent mining
11
     attorney?
12
               That is correct.
         Α.
13
               And considered authoritative on these
         Ο.
14
     issues?
15
         Α.
16
               Would you give his legal interpretations
         Q.
17
     of the mining laws more weight than that of a
18
     layperson?
19
         Α.
               Obviously.
20
               MR. HARRISON: If I could show CX
21
     Exhibit 10.
22
              (By Mr. Harrison) These are excerpts from
23
     Mr. Lindley's treatise that you testified about on
24
     direct, correct?
25
         Α.
               Yes.
0267
               MR. HARRISON: If we could turn to
 1
 2
     Page 25.
 3
              (By Mr. Harrison) In talking about mining
     claims, in the middle of Page 25, Mr. Lindley said
 4
 5
     that, "A patent adds but little to a locator's
 6
     security."
 7
               Do you see that?
 8
         Α.
               Yes.
9
               And so as long as a claim is located or
     staked, patenting doesn't mean much to Mr. Lindley.
10
11
               Would you agree with that?
12
         Α.
13
               Are mining claims property rights?
         Q.
14
         Α.
               They are possessory rights.
15
               MR. HARRISON: If we could turn to the
16
    next page.
17
              (By Mr. Harrison) At the top of Page 26,
18
     the first sentence, Mr. Lindley writes, "The owner
19
     of such a location is entitled to the exclusive
20
     possession and enjoyment against everyone, including
21
     the United States itself."
22
               Did I read that correctly?
23
               You read that correctly.
         Α.
24
               In your direct, you testified that the
         Ο.
25
     locator's rights are subordinate to the
0268
 1
     United States; is that correct?
```

Yes, I did.

Α.

```
Q.
               Is that still your testimony?
 4
         Α.
               Absolutely.
 5
               So you disagree with Mr. Lindley that a
         Ο.
 6
     locator has exclusive possession, even against the
 7
     United States?
 8
         Α.
               Absolutely.
 9
               But even if the United States is the
         Q.
10
     nominal paramount owner or paramount proprietor, as
11
     you say.
12
               From a practical perspective, the
13
     United States did not act as the paramount
14
     proprietor at the Questa Mine site; is that correct?
15
               No, that is not correct.
16
               A paramount proprietor is a paramount
17
     proprietor. They acted as the Government's
     representative at the site.
18
19
               They didn't control any of the mine's
20
     mineral activities, did they?
               Of course, they did.
21
         Α.
22
               They didn't dictate where and how the
23
     mining should occur?
24
               They dictated how and where waste dumps
25
     should be disposed of.
0269
               We will get to that in a little bit.
 1
         Ο.
 2
               The Government did not control timber
 3
     activities on the land, did they?
               When you say, "on the land," what are you
 4
         Α.
 5
     referring to?
 6
               On the Questa site.
         Q.
 7
               The Questa site has both patented private
     land and unpatented Federal land, so you'll have to
 8
9
     be more specific for me to answer that.
10
               So on the unpatented claims for both
11
     mining claims and mill sites, the United States did
12
     not -- was not in use of that property when
13
     Chevron -- after Chevron had located or staked
14
     claims on those, correct?
15
               I don't think that's correct. They had
         Α.
16
     whatever use they wanted to that property.
17
               The United States, in fact, did not use
     that property while Chevron had mill site and mining
18
19
     claims; is that correct?
20
        Α.
               I don't have any information that they did
21
     not use that.
22
               Well, in your deposition, you testified
         Q.
23
     that the Federal Government could use these lands,
     the service of these lands, for recreations.
25
               Do you recall testifying to that?
0270
 1
        Α.
               I do.
```

```
What recreations could have been used in
     the area around the open pit mine when Chevron held
     unpatented mill site and mining claims there?
               It would have been difficult, but if a
 5
     hunter wanted to go in there, he probably could
 6
           If a hiker wanted to go in there, he probably
 7
 8
     could have. If a photographer wanted to go in
 9
     there, he probably could have.
10
               Chevron had a security gate at the front
11
     of the facility, correct?
12
               Oh, absolutely.
         Α.
13
               They had fences, correct?
         Q.
14
               There were fences.
         Α.
15
               Could you describe where you might be
16
     talking about with that?
17
               Throughout the property there were fences
     that restricted the ability of the general public to
18
19
     access the property.
20
               There were some fences and some gates.
21
               But if my understanding is correct, and I
     have been on the site a couple of times, those
22
23
     fences and gates were on Molycorp private property.
24
               So if one of Chevron's competitors, say
25
     Climax, decided it wanted to access the property on
0271
 1
     the unpatented mining or mill site claims, would
 2
     they have been able to go on to that property, given
 3
     that your testimony is they are public lands?
 4
         Α.
               Sure.
 5
               As paramount proprietor, Mr. Lindley also
     explained that there are, quote, "equitable
 6
 7
     circumstances that bind the United States from
     interfering with Chevron's mining or possession."
 8
 9
               Do you recall him writing about that?
10
         Α.
               I don't recall that specific statement.
11
               So if we could look below, on Page 26
12
     here, the second sentence, quote, "There are
13
     equitable circumstances binding upon the conscious
14
     of the governmental proprietor that must never be
15
     disregarded."
16
               Do you see that?
17
         Α.
               I do.
18
               If the United States were to divest or
19
     withdraw Chevron's mining rights, according to
20
     Mr. Lindley, that would violate -- that would be
21
     improper?
22
         Α.
               Would you repeat that again, please?
23
               Sure, I will rephrase.
         Q.
24
               The next sentence will be helpful, as
25
     well.
```

0272 "Rights have become vested that cannot be

divested without the violation of all the principles of justice and reason."

So my question is, if the United States were to attempt to divest or withdraw Chevron's mining rights, that would be violative of, quote, "all the principles of justice and reason," according to Mr. Lindley?

A. I guess I would have to research that a little bit further than sitting right here on the stand and -- but the Government has -- has withdrawn from entry of lands that have mining claims all the time.

The Government has stopped patenting on the mining claims. So it does it constantly.

- Q. And, but practically speaking, the United States never withdrew or divested Chevron's mining rights here by withdrawing either of their mining claims?
 - A. Not that I am aware of.
- Q. And they never restricted any of Chevron's mining claims, correct?
 - A. They never restricted?
 - Q. Yeah. Well, they never -- strike that. MR. HARRISON: Let's look at another

0273

1 authority on the role of the Federal Government with
2 respect to mining claims.

If we could show CX006, please.

- Q. (By Mr. Harrison) You testified in your direct about this 1908 letter to the editor written by Gifford Pinchot; is that correct?
 - A. Yes, sir.
- Q (By Mr. Harrison) And Mr. Pinchot was the first director of the Forest Service?
 - A. He was the first chief, yes.

And he wasn't called a chief at that time, he was just called The Forester.

- Q. Generally speaking, an individual doesn't or didn't need permission to stake or locate claims in the National Forest; is that correct?
- A. They needed the lands to be open by the 1872 mining log, and so the Federal Government gave them that authority, yes.
- Q. But other than that, there is no permission that a locator needs to seek or obtain before they can stake a mining claim?
- A. Well, that is the permission. The Federal Government gave them that permission.
- Q. And the Forest Service can't interfere with someone's staking of claims; is that also 0274
- 1 correct?

```
They can. They can. You know, anytime
     Dick and Harry can go out there and put four stakes
 3
 4
     in the ground.
 5
               MR. HARRISON: Let's turn to Page 3, the
 6
     second full paragraph that starts with, "The fact
 7
     that."
 8
              (By Mr. Harrison) In this paragraph,
 9
     Mr. Pinchot says that the Federal Government will
10
     stay out of the way of mining activities in the
     National Forest; is that correct?
11
12
               Well, I think you were paraphrasing in
13
     there, but I don't think that is exactly what he
14
     says.
15
               Mr. Pinchot says here that, at the bottom,
16
     "No rules and regulations of the Forest Service have
17
     ever interfered with the right to prospect, locate
     and develop mineral claims."
18
19
         Α.
               That is right. At that time there were no
20
     rules that did that.
21
               MR. HARRISON: If we could go to the top
22
     of Page 4.
23
              (By Mr. Harrison) The first paragraph says,
24
     "Even if the Forest Service desired to prevent
25
     prospecting in the National Forest and emphatically
0275
     does not, it could not do so under the law."
 1
 2
               Do you see that?
 3
               Yes, I do.
         Α.
 4
         Q.
               Do you agree with that assessment?
 5
         Α.
               I do, at that time.
 6
         Ο.
               You testified at your deposition --
 7
               And I -- and that's because the law at
     that time allowed prospecting and exploration under
 8
9
     the 1872 mining on National Forest, unless they were
10
     withdrawn for other purposes.
               You testified at your deposition that,
11
         Q.
12
     "The Forest Service did not violate the law or do
13
     anything improper, " in your opinion, "with the
14
     management of the Federal lands regarding Chevron's
15
     mining and mill site claims."
16
               Do you recall testifying to that?
17
         Α.
               Is that still your testimony?
18
         Q.
19
               It is.
         Α.
20
```

- Q. And since the early 20th Century, Chevron has treated the entire Questa Mine property as its own, both the property it owned and the property it held on patented mining and mill site claims on; is that correct?
- 25 A. No, I don't think that's correct. 0276

22 23

24

1 Q. Is it true that Chevron included

```
unpatented mining and mill site claims and
 3
     descriptions of its land holdings?
 4
         Α.
               Yes.
               And is it true that Chevron also
 5
         Ο.
 6
     represented in patent applications that it held
 7
     possession and control of the located or staked
 8
     lands?
 9
               That's correct. That is what a mining
         Α.
10
     claim is. It is a possessory right against other
     junior claimants coming in and jumping the claim.
11
               MR. HARRISON: If we could show USX32.
12
13
              (By Mr. Harrison) This is an August 1976
14
     land status map that was produced by Chevron.
15
               Have you seen this map before?
16
               You know, I have.
         Α.
17
               And is it an accurate map representing
         Q.
18
     Chevron's landownership?
19
               That, I don't know if it is all accurate
     on landownership.
20
21
               Do you have any reason to dispute that
22
     this was produced by Chevron or that it is a
23
     document in this case?
24
               I have no reason, one way or the other.
25
               MR. HARRISON: Your Honor, I would move to
0277
     admit USX32.
 1
 2
               MR. HOPSON: No objections, Your Honor.
 3
               THE COURT: Without objection, admitted.
 4
               (Exhibit admitted, USX32.)
 5
              (By Mr. Harrison) On this map it shows --
 6
     this is after the land exchange is completed,
 7
     correct?
               That is correct. It shows 1976. The land
 8
        Α.
 9
     exchange was completed in 1974.
10
               And it shows that Chevron has owned or
11
     staked virtually all of the land from Questa to Red
12
     River; is that correct?
13
               I assume that is what this -- this map is
14
     showing, but I don't know it as a fact.
15
               And Chevron denotes the boundary of that
16
     area as, quote, "boundary of Molycorp land."
17
               Do you see that?
18
         Α.
               I do see that notation.
19
               And also, it does show two separate ore
         Q.
20
     bodies here, the northeast zone and the southwest
21
     zone?
22
               It shows some high-grade areas of an ore
        Α.
23
     body, yes.
24
               Would you agree that Chevron was able to
         Ο.
25
     freely acquire and use the land at and around the
```

0278

Questa site?

```
No, I wouldn't exactly agree with that.
 3
     It wasn't exactly easy to acquire the lands in the
 4
     exchange.
 5
               MR. HARRISON: Let's look at CX282.
 6
               We have seen this exhibit several times
 7
     already, but it is the February 1972 Feasibility
 8
     Study.
 9
               If we could turn to Pages 38 and 39.
10
              (By Mr. Harrison) This section of,
     "Landownership, Claims, Leases and Patents."
11
12
               Would you agree with the first sentence
13
     here that "Chevron's land acquisition efforts have
14
     been relatively unhampered"?
15
               Well, if that is what it says, they --
16
     they'll probably have that understanding.
17
               And this is while the land exchange is
         Q.
18
     going on; is that correct?
19
               Over the past 50 years, yes.
20
               And in here, it notes that, "That is not
     to say that certain problems have not arisen in the
21
22
     purchasing of homesteads and other privately-owned
23
     land."
24
               Do you see that?
25
               Yes.
        Α.
0279
               And then it concludes, this paragraph,
 1
     "Forest lands are open to mineral location and
     virtually all of the Red River trench has been
     staked with low mining claims under the mining law
 5
     of 1872."
 6
               Do you see that?
 7
               I do.
         Α.
 8
               So here it seems that the only issue
9
     Chevron has with acquiring land is with private
10
     landowners and homesteads, not with the Federal
11
     Government; is that correct?
12
               Apparently, that is true.
13
               So around the same time the Chevron Group
         Q.
14
     was concerned with changes to the mining laws and
15
     regulations, would you agree with that?
16
               I think the entire mining industry was
17
     concerned about changes in the mining law.
               And fair to say, Chevron felt pressure to
18
19
     act fast in order to own and obtain additional lands
20
     at and around the Questa Mine site?
21
               I think it was one of the considerations,
22
     that they agreed to the exchange.
23
               MR. HARRISON: If we could look at the
24
     middle of Page 38, the paragraph that starts, "It is
25
     expected" -- sorry, the next paragraph.
0280
```

(By Mr. Harrison) Chevron writes in the

```
memo notes, "The only thing certain is that the
 3
     mining law of 1872 will be repealed. The only
 4
     question is what will take its place. No matter
 5
     what legislation is passed, it will not be as
 6
     favorable to the mining industry as the present
 7
     law."
 8
               Do you see that?
 9
               I do.
         Α.
10
               So fair to say, Chevron felt a need to
11
     acquire as much property as quickly as possible
12
     before changes to the mining laws would occur?
13
               I think that is fair to say, and it was a
14
     very pressured statement because that is exactly
15
     what happened in 1995 when Congress said there would
16
     be no more patenting mining claims.
17
               And this section ends -- if we could look
18
     at Page 39, the last paragraph -- by saying that, "A
19
     concerted effort should be initiated in patenting
20
     mill site claims adjacent to the Questa main ore
21
     body and mill patent ore body areas."
22
               So Chevron here is noting that it needs to
23
     make a concerted effort at that time to acquire this
24
    property?
25
         Α.
               Absolutely.
0281
               If we could just go back up to --
 1
         Ο.
 2
         Α.
               I assume that is because they would --
     they would have more control over their own private
     land than if it were Federal land.
 5
               And to that point, Mr. Fredley, if we
 6
     could go back to the paragraph that starts with,
 7
     "Current proposals."
 8
               Here Chevron expresses concern that, "The
 9
     changes in the mining law would allow the Secretary
10
     of Interior to dictate the method of prospecting,
11
     when mining should start and stop, how the deposit
12
     is said to be mined, et cetera.
13
               "The investment risk still falls on
14
     industry but it will have little control over
15
     anything else."
16
               Do you see that?
17
         Α.
               I do.
18
               And that is consistent with the concern
19
     that you just testified about?
20
               Absolutely.
        Α.
               You testified, in your direct, that "The
21
     United States' ownership rights are similar to a
22
23
     private landowner's fee simple ownership rights."
24
               Is that correct?
25
               Yes.
         Α.
0282
 1
         Q.
               And you also testified that, "The
```

- 2 United States holds the same power over Federal land 3 as an individual would over private land."
 - A. More power.
 - Q. The general public cannot enter someone's private property, locate claims and explore for minerals, correct?
 - A. For sure.
 - Q. But that was the case with the United States land until at least 1976?
 - A. That's private individuals.
 - Q. Strike that.

Someone from the general public could enter land of the United States, locate claims and explore for minerals without providing any notice to the United States, correct?

- A. If the lands were open to mineral entry, that is correct.
- Q. A private fee simple landowner has the right to exclude people from their property, correct?
- 22 A. That's correct, as does the Federal landowner.
- Q. But the United States can't pick and choose who stakes mining claims on its property, can 0283
- 1 they?

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- A. That is, that's correct, as long as the person is a citizen of the United States or a corporation, they can stake a mining claim on lands that are available under the 1872 mining law.
- Q. And someone just can't start exploring or developing a mine on private property without the approval of the owner, correct?
- 9 A. Correct. And that is the same with the 10 Federal owner.
 - Q. After 1976?
 - A. No, since the 1872 mining law, and the Federal owner is the one that passed the 1872 mining law that allowed that person or corporation to come onto the land.
- Q. You would agree that the United States supports many individuals, companies and industries, correct?
 - A. Yes.
- Q. And, in fact, that is the primary purpose of the Government itself?
- A. I think the primary purpose of the Government is to support the citizens of the country and defend our shores, deliver our mail.
- Q. So on some level, then, nothing is 0284
 - 1 possible without the support or encouragement or

involvement of the United States?

```
3
               I guess that is somewhat a fair statement.
         Α.
 4
               So let's go through some of your direct
 5
     testimony on areas that you claim the United States
 6
     supported, encouraged or facilitated Chevron's
 7
    mining developments.
 8
               Chevron's open pit mining operations
 9
     required a tailings implement area, correct?
10
               Yes, it did.
               And without that, it would not have
11
         Q.
     existed? The mine could not have existed?
12
13
         A.
               That's correct.
14
               So in 1964, Chevron purchased 440 acres
         Q.
15
    from the State of New Mexico for the first tailings
16
     implement area?
17
               That's correct.
         Α.
18
               And the State of New Mexico knew that
         Q.
19
    Chevron was going to use the land for a tailings
20
    area?
               That is correct.
21
        Α.
22
         Ο.
               And Chevron started construction on the
23
    tailings pond the next year, 1965?
24
              I believe that's correct.
25
         Q.
               Did the State of New Mexico support or
0285
     encourage Chevron's Questa Mine development by
 1
     selling them the property for the eastern tailings
     implement area?
 4
         Α.
               Apparently.
 5
               Chevron also needed to obtain property
     right-of-ways from dozens of private landowners for
 6
 7
     the tailings implement area; is that correct?
               I believe that is right.
 8
         Α.
9
               And did each of these landowners support
10
     and facilitate Chevron's mining operations?
11
         A.
               I have no idea.
12
               Well, they provided right-of-ways for
13
     Chevron to be able to use the tailings implement
14
     area.
15
               Would that be sufficient, under your
16
     opinion, to constitute support and encouragement?
17
               A private individual -- private
     individuals did a right-of-way for tailings
18
19
     implements, is that what you are saying?
20
               MR. HARRISON: If we could show USX476.
21
               This is an admitted exhibit that was part
     of Mr. David Shoemaker's deposition and was an
23
     attachment to Chevron's January 2001 response letter
24
     to the EPA.
25
               If we could turn to Page 8.
0286
 1
         Q
              (By Mr. Harrison) This is a list of
```

```
tailings dam previous owners.
 3
               You have no reason to dispute the contents
 4
     of this list?
 5
               THE COURT: Counsel, let me inquire.
 6
               Are you attempting to do something in
 7
     contrary to the stipulated order concerning
 8
     evidentiary items that the tailings don't have
 9
     anything to do with this case?
10
               MR. HARRISON: No, Your Honor, I am
11
     simply --
12
               THE COURT: What are you trying to do?
13
               MR. HARRISON: I am showing Mr. Fredley
14
     that -- I'm trying to elicit testimony that there
15
     were other individuals and entities who were
16
     involved in the development of the Questa Mine site.
17
               THE COURT: And your point is?
                             That his testimony is that
18
               MR. HARRISON:
19
     it was the United States' involvement that
20
     encouraged and facilitated, but the point is there
21
     are others as well who did that.
22
               THE COURT: I think it is a given, but go
23
     ahead.
24
              (By Mr. Harrison) So for the second
25
     tailings pond, Chevron purchased land from a BLM
0287
     public land sale option in 1966; is that correct?
 1
 2
         Α.
               That is correct.
 3
         Q.
               Chevron needed this land?
 4
         Α.
               They did.
 5
               And Chevron initiated the BLM process to
         Q.
 6
     request the public sale land auction?
 7
         Α.
               Yes.
 8
         Q.
               Chevron was the highest bidder?
9
         Α.
               Yes.
10
         Ο.
               And it was reasonable for BLM to accept
11
     the highest bid of Chevron, correct?
12
               Yes.
         Α.
13
         Q.
               Were any tailings disposal disposed of --
14
     strike that.
15
               You are not aware of any tailings
16
     disposals on the area that was the subject of the
17
     public land sale prior to Chevron purchasing it at
     the public land sale auction; is that correct?
18
19
         Α.
               That is correct.
20
               And prior to the land sale auction,
21
     Chevron had actually located mill sites on this
22
     area, correct?
23
               That is correct.
         Α.
24
               And so Chevron could have obtained
         Ο.
25
     ownership by applying for patents on these lands had
0288
 1
     there been a current mining use, correct?
```

- A. As long as they were presently being used and occupied for mining or milling purposes, they could have done that.
- Q. Chevron preferred the land sale or the public land sale option instead because they thought it would be better public relations; is that correct?
 - A. That is correct.
- Q. And it was Chevron's decision where to locate its tailings implement areas?
- A. That is correct. There wasn't too many areas available and that is why they choose this spot.
- Q. Chevron also located and patented, in your words, quote, "Some mill site claims near the western tailings area."

Is that correct?

- A. That is correct.
- Q. These are called the Pinon Claims?
- 21 A. They are.

MR. HARRISON: If we could show USX432.

And so the Pinon Claims are the lightly

shaded areas around the periphery of the implement area, correct?

0289

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23

- A. They are the stipulated areas to the north and southwest part, yes.
 - Q. And a diversion ditch goes through these mill sites, correct?
 - A. Apparently, yes.
- Q. And that is for diverting natural runoff, as you heard Mr. Dewey testify to yesterday?
 - A. That is correct.
- 9 Q. And the diversion ditch was not used for tailings waste disposal; is that correct?
 - A. It was used to support the tailings disposal.
- Q. By preventing the natural runoff from going into the tailings area?
 - A. That's correct.
- 16 Q. I want to ask just two general questions 17 about the tailings pipeline, with respect to 18 ownership.

It was Chevron's decision to develop the tailings pipeline; is that correct?

- A. Absolutely.
- Q. And Chevron needed to obtain permission for the tailings pipeline from several entities in addition to the Forest Service; is that correct?
- A. Molycorp did, yes, for sure.
- 1 Q. And any one of those could have withheld

- their consent or approval for the routing of the 3 pipeline, correct?
 - They could have as private landowners, just as the Forest Service could and the Federal Government could.
 - You testified that special use permits are completely discretionary, correct?
 - Yes, I did.
 - But the Forest Service acted properly and followed its regulations when it issued the special use permit, correct?
 - I have no reason to think they violated any regulation or law by issuing the special use permit.
 - And there is no reason for the Forest Q. Service to terminate or cancel the special use permit, correct?
 - Α. They didn't do it.
 - Q. And there would have been no reason why they could have?
 - Α. I don't know of any reason.
- Q. Another permit that you testified about was the decant water discharge permit issued by BLM. 25 Do you recall that as your testimony? 0291
- I do. 1 Α.

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- 2 MR. HARRISON: If we could show USX432, 3 again.
- (By Mr. Harrison) So the tailings disposal 4 5 areas are the two dark areas in the middle of the 6 map, correct? 7
 - That is right. Α.
 - And there are two sections of tailings, Q. Section 35 and Section 36?
 - In general, that is a correct description.
 - And the decant water discharge permit was only for Section 35 of the tailings area; is that correct?
 - As far as I know, that is correct. Α.
- Chevron did not receive a permit for 15 Q. 16 Section 36 because the water flowed over Chevron's own property and private right-a-ways?
 - You know, I am just not sure on that. Α.
 - Q. Okay.
- 20 This diagram does not show the Α. 21 right-of-way, by the way, for the decant water.
- 22 Q. But --
- 23 It shows present decant but it doesn't Α. 24 show right-of-way.
- 25 I will ask a general question and not 0292
 - pertaining to the map itself.

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For the decant water discharge permit in Section 35 over the BLM land, BLM required a stipulation in 1970 that the water must meet Federal, State and Local water quality standards, correct?
```

- A. That is my understanding.
- Q. And this was before the Clean Water Act was enacted, so that did not require Chevron at that time to obtain a national pollutant discharge elimination permit; is that correct?
 - A. I don't know.
- Q. And we already talked about, but you heard Mr. Dewey testify about how the decant process would, in theory, send clean water into the Red River; is that correct?
 - A. I think that is correct, yes.
- Q. And so there is no reason, in your opinion, for BLM to not allow Chevron to send clean water over Federal lands into the Red River, correct?
 - A. Correct.
- Q. We will get to the land exchange in a little bit, but I just want to ask two questions there now.

A land exchange would give Chevron fee ownership of that land?

- A. That is correct. It is also my understanding that there could have been conditions placed on it, but in general, it is fee ownership.
- Q. And you also agree, as you testified at your deposition, that there was no reason for the Government to disapprove or refuse the land exchange; is that correct?
- A. No, they were the ones that suggested it. Why would they refuse it?
- Q. Let's switch gears and talk about the pre-DMEA exploration and a few issues there. I know it's been discussed at length but there are a few questions I want to ask you about your direct testimony.

So once Chevron exhausted the high-grade ore in the first underground mine, you say that Chevron had no planned exploration and no reserves until the DMEA application; is that correct?

- A. That is what Molycorp said, yes.
- Q. And you heard the testimony of Mr. Dewey yesterday that Chevron knew of the existence of low-grade ore before applying for the DMEA loan, correct?

1 A. Yes.

```
You also heard Mr. Dewey testify that
 3
     Chevron was very familiar with John Schilling and
 4
     his 1956 report that noted a large low-grade
     molybdenum ore deposit, correct?
 5
 6
               Yes.
         Α.
 7
         Q.
               You also heard that Mr. Dewey said that
 8
     the Chevron team's reluctance to undertake low-grade
 9
     ore exploration because it, quote, had no use for
10
     it, end quote?
11
        Α.
               Yes.
12
         Ο.
               Do you take issue with any of that of
13
     Mr. Dewey's testimony?
14
         Α.
               I don't.
15
               You also heard Dr. Rigby testify that
16
     Chevron was well aware of diamond drilling methods
17
     at the time of the DMEA application; is that
18
     correct?
19
               MR. HOPSON:
                            Objection, Your Honor.
20
     Misstates prior testimony.
21
               THE COURT: Sustained.
22
              (By Mr. Harrison) Are you aware of whether
23
     diamond drilling methods were prevalent at the time
24
     of the DMEA application in the late 1950s in the
25
     mining industry?
0295
 1
               Of course.
         Α.
 2
               Could you give me a second so I could get
 3
     a drink of water?
 4
               You also heard testimony about Dr.
 5
     Carpenter and his involvement with Chevron at the
     site prior to the DMEA loan application; is that
 6
 7
     correct?
 8
         Α.
               Yes.
 9
               MR. HARRISON: If I could show CX186.
10
              (By Mr. Harrison) This is a 1968 article
11
     from Robert Carpenter, titled "Geology and Ore
12
     Deposits of the Questa Molybdenum Mine Area."
13
               Have you seen this before?
14
               You know, I have seen that.
         Α.
15
               MR. HARRISON: Your Honor, I would like to
16
     move for admission of CX186.
17
               MR. HOPSON: No objection, Your Honor.
               THE COURT: Without objections, it will be
18
19
     admitted.
20
               (Exhibit admitted, CX186.)
21
              (By Mr. Harrison) If we could turn to
     page three, paragraph which begins, "Because of."
22
23
               So you heard the testimony that Dr.
24
     Carpenter was intimately involved with the Questa
25
     Mine, correct?
0296
        A. Yes, I did.
 1
```

```
Okay. In this paragraph, Dr. Carpenter
     writes, quote, "Underground headings were advanced
 4
     into target areas and diamond" -- or, excuse me, let
     me begin with the first sentence of the paragraph.
 5
 6
               "Because of increasing difficulties of
     maintaining the small tonnage high-grade production,
 7
 8
     an intensive exploration program was initiated in
 9
     1953."
10
               Do you see that?
11
        Α.
               I do.
12
               And then two sentences later, it says,
         Ο.
13
     "Underground headings were advanced into targeted
14
     areas and diamond drilling was initiated."
15
               Do you see that?
16
               I do.
         Α.
17
               And then the next sentence says, "By 1957
         Q.
     it was apparent that the Questa Mine held promise of
18
19
     large reserves of low-grade molybdenum ore."
20
               Do you see that?
21
               I do.
         Α.
22
         Ο.
               You also heard testimony from Mr. Dewey
23
     and Dr. Rigby that prior to the May DMEA contract,
24
     Chevron was able to obtain millions of dollars in
25
     financing, correct?
0297
 1
        Α.
               Yes.
 2
               MR. HOPSON: Objection. Again, that
     question misstates the prior testimony.
 4
               THE COURT: Can you restate your question?
 5
              (By Mr. Harrison) Are you aware that in
 6
     June, 1955, Chevron sold Kennecott $2.8 million
 7
     worth of stock?
 8
               I guess I am aware of it. I've heard
9
     testimony of that but I am not a mine finance expert
10
     or stock expert.
11
               Are you aware that in June, 1954, Chevron
         Q.
12
     obtained $1.5 million in loans?
13
         Α.
               Apparently.
14
               And are you aware that Chevron had a
15
     $4.2 million stock offering in 1957?
16
               MR. HOPSON: Objection, cumulative.
17
               THE COURT: I will overrule that.
18
               Apparently.
         Α.
19
              (By Mr. Harrison) So in your opinion -- in
20
     your opinion in this case, you have testified that
21
     Chevron had given up on exploration until DMEA; is
22
     that correct?
23
         Α.
24
               MR. HARRISON: If we could show USX520.
25
              (By Mr. Harrison) This is Chevron's --
0298
     Molycorp's 1956 annual report, which predates the
```

```
DMEA contract, correct?
 3
               Yes, it predates by a few months.
 4
               MR. HARRISON: If we could go to
 5
     page four, under "General."
 6
              (By Mr. Harrison) The first paragraph says,
 7
     "Your company continues its policy of searching for
 8
     new sources of minerals."
 9
               Do you see that?
10
               THE COURT: The first paragraph?
11
         Α.
               Yes, I do.
12
              (By Mr. Harrison) The first sentence of the
13
     next paragraph says, "Concentrated exploration is
14
     currently being done at Questa New Mexico."
15
         Α.
               Yes.
16
               And then about --
         Q.
               THE COURT: Why don't you ask him to read
17
     it himself and then you can ask him questions.
18
19
              (By Mr. Harrison) Sure. I just have one
20
     more question on this, but if you could read that
21
     paragraph and let me know when?
22
         Α.
               Read the entire?
23
         Q.
               Just the paragraph "Concentrated
24
     exploration."
25
               THE COURT: Just to yourself.
0299
 1
               Okay. I have read it.
         Α.
 2
              (By Mr. Harrison) In the middle of the
     paragraph, it says that "Surrounding land had been
     staked on behalf of your corporation in order to"
 5
     and then it cuts off "extensions of indicated
 6
     mineralized area."
 7
               Do you see that?
 8
         Α.
               I do.
9
               So if, in your opinion, Chevron had given
10
     up on exploration efforts, why would they be staking
11
     claims prior to the DMEA contract?
12
               Well, there are lots of areas outside the
13
     current underground mine. So I assume that they
14
     were looking at other areas.
               Also, I think what this might be talking
15
16
     about is, this was right in the middle of or towards
17
     the end of their negotiations with the DMEA people
18
     about initiating a contract.
19
               And so when they say "core drilling will
20
     shortly begin," I suspect that that is the core
21
     drilling that is defined by the contract that is
22
     just a couple of months from the future.
23
               You have heard testimony about DMEA, that
24
     it is a voluntary program, correct?
25
        Α.
               Yes, it is.
0300
1
         Q.
               And DMEA requires that the plan must show
```

```
a geological probability of making a significant
 3
     discovery?
 4
         Α.
               Yes.
 5
               And you heard Dr. Rigby testify earlier
         Ο.
 6
     today that the purpose of DMEA is not for
 7
     prospecting?
 8
         Α.
               That is correct.
 9
               You testified that DMEA approval of
         Q.
10
     Chevron's application was entirely discretionary,
11
     correct?
12
               That's correct.
         Α.
13
               But, again it was Chevron who decided to
         Ο.
14
     submit the application?
15
               Yes, they did.
         Α.
16
               And they entered into the contract in May,
         Q.
17
    1957?
18
         Α.
               That is correct.
19
               Chevron was not required to agree to the
20
     terms of the contract?
               Molycorp was not required to agree to the
21
     terms of the contract, if they wanted the contract.
22
23
               And DMEA repayment obligations are created
24
     only if Chevron were to develop a producing mine,
25
     correct?
0301
 1
         Α.
               And a discovery had been determined.
 2
               Repayment obligations are not contingent
         Q.
     on just a recovery?
 4
         Α.
               Would you state that again?
 5
         Q.
               Sure.
 6
               The repayment obligations under DMEA
 7
     require both a certificate of discovery and
     development by the participant, correct?
 8
 9
               As a result of that discovery, that is
         Α.
10
     correct.
11
               You testified, in your direct, that
         Q.
12
     repayment was required, quote, "if a discovery was
13
     made from the exploration work, the federal
     government was entitled to interest-free royalties
14
15
     in return for the initial loans."
16
               Do you recall that?
17
         Α.
               I do.
18
         Q.
               Is that still your testimony?
19
         Α.
               Yes.
20
               But in addition to that, the repayment
21
     obligations are -- require a producing mine,
22
     correct?
23
               Well, that is kind of the only way that
24
     you produce minerals and make money is from a
25
    producing mine and that is what happened.
0302
```

Chevron or DMEA contract ended in June,

1

Q.

```
1960, correct?
 3
         Α.
               Yes.
 4
         Ο.
               And Chevron's final report noted that
 5
     there were high -- there was a several high-grade
     ore bodies in the area or low-grade low bodies in
 6
 7
     the area, generally speaking?
               I think that is correct.
 8
                                         That is what
 9
     Molycorp stated in their final report.
10
               And Molycorp also did additional
     exploration on its own during that same time period,
11
12
     correct?
13
               That is correct.
         Α.
14
               DMEA also issued its own final report in
         Q.
15
     1960, correct?
16
              Yes, they did.
         Α.
17
               And it is also noted the presence of a
18
     large low-grade ore body, correct?
19
               Absolutely. A tremendous deposit of
20
     low-grade ore.
21
               And DMEA's final report also said that it
         Q.
22
     would take considerable time and capacity for
23
     explore this low-grade ore body, correct?
24
         Α.
               For sure.
25
         Q.
               Is it fair to say that Chevron did
0303
     substantially more exploration after the DMEA
 1
 2
     contract than prior to it, with respect to
 3
     developing the --
 4
               MR. HOPSON: Objection, cumulative.
 5
               THE COURT: Overruled.
 6
               Would you repeat that, please?
         Α.
 7
              (By Mr. Harrison) Sure.
 8
               Did Chevron do more exploration for the --
9
     to develop the open pit mine after the DMEA contract
10
     ended?
11
               They did a lot more drilling and
         Α.
12
     delineation of the ore deposit.
                                      There is no
13
     question about that.
14
               But I think Dr. Rigby addressed that
15
     pretty clearly this morning, and I have absolutely
16
     no reason to doubt anything he said about that.
17
               Chevron didn't formally decide to develop
     an open pit until 1964, correct?
18
19
               I don't know when they formally decided to
         Α.
20
     do it or not.
21
               In October, 1964, Chevron estimated the
     post of developing the open pit mine and facilities,
22
23
     would be $27.5 million.
24
               Are you aware of that?
25
               I quess so.
         Α.
0304
1
         Q.
              And Chevron borrowed 20 million?
```

THE COURT: If you know.

```
3
              (By Mr. Harrison) If you know.
 4
         Α.
               I assume they did but I don't know for
 5
     sure.
 6
               And just two years later, in 1966, are you
 7
     aware that Chevron estimated that the total cost for
 8
     development, exploration and construction were
 9
     upwards of $44 million?
10
               That sounds right.
         Α.
               And that was at the time when the mine was
11
         Q.
12
     just beginning its operations?
13
               Correct.
         Α.
14
               So part of its decision to develop and
         Q.
15
     mine using the open pit method, Chevron designed its
16
     open pit mining facilities, correct?
17
         Α.
               Absolutely.
18
         Q.
               And it built or modified facilities to
19
     transition from the underground mine to the open pit
20
     mine, correct?
21
               A major redesign of all of their
         Α.
22
     facilities.
23
         Q.
               It built a new expanded mill with course
24
     or storage bins?
25
        Α.
               Yes.
0305
               And that was on land Chevron owned,
 1
         Ο.
 2
     correct?
 3
        Α.
               I think so, yes.
               It built primary, secondary and tertiary
 4
         Q.
 5
     crushers on land that Chevron owned?
               They built everything they needed to
 6
         Α.
 7
     develop the mine.
 8
               On land that Chevron owned?
         Q.
9
               Some of it, and some of it was on federal
         Α.
10
     land.
11
               Subject to a mill site claim?
         Q.
12
               That is correct.
13
               The land that ultimately became the open
14
     pit mine was owned by Chevron at that time, correct,
15
     at the start of development?
16
               Well, I think there are different time
17
     frames of ownership. But I don't believe all of the
     land that was developed into the open pit was owned
18
19
     by Chevron as patented mining claims.
20
         Q.
              So Chevron's open pit operations began in
21
     late 1965 and continued in earnest in early 1966?
22
               That is true.
         Α.
23
               And you heard Mr. Dewey testify yesterday
24
     about Chevron's mining claims for the open pit?
25
        Α.
               Yes.
0306
1
         Q.
              And in those mining plans, Chevron
```

```
discussed ways to dispose of waste rock?
 3
         Α.
               Absolutely.
 4
         Q.
               And Chevron chose where to dispose of that
     waste rock?
 5
 6
        Α.
 7
               Depending on what period of time we are
 8
     talking about here.
 9
         Q.
               Sure.
10
               At the beginning of the open pit.
11
         Α.
               That is correct.
12
               And initially, Chevron did not choose
13
     these waste-dump areas based on any input from the
14
     United States?
15
               I think that is true, yes.
         Α.
16
               You heard Mr. Dewey testify about the west
         Q.
17
     wall and what Chevron's engineers called Quivering
     Ridge; is that correct?
18
19
               I believe that is -- yeah, I didn't use
     the term Quivering Ridge, but yes.
20
21
               So shortly after beginning open pit
22
     operations in 1967, there was a major fault in the
23
     west wall of the open pit?
24
               I think there was testimony that it was
25
     not a fault but there was a weakness.
0307
               But the weakness was on Chevron-owned
 1
         Ο.
 2
     land, correct?
               I would have to look at the maps and the
     patented or unpatented mining claims again, but I
 5
     won't disagree with it.
 6
               And you heard Mr. Dewey testify about
         Q.
 7
     Chevron deciding to continuing mining and revising
     its mining plan in response to what has been called
 8
9
     a fault?
10
         Α.
               Yes.
               The United States did not participate or
11
         Q.
12
     make a decision for Chevron to continue its open pit
13
     mining under the new mining plan; is that correct?
14
               That is correct.
15
               And the revised mining plan increased the
         Q.
     waste ratio from about two-to-one to roughly
16
17
     ten-to-one; is that correct?
               That's correct.
18
         Α.
19
               So Chevron then needed to figure out a
         Ο.
20
     place to put all of this new waste rock, correct?
21
```

0308 1 Are you aware of those?

22

23

24

25

Q.

pit area.

That is correct.

So in 1968, at about the time of the

discovery of the west wall issues, Chevron applied

for patents on several mining claims around the open

A. Absolutely.

- Q. And the patents for those issued in two years later, in 1970?
 - A. That is right.
- Q. But either with acquiring those additional -- that additional land, Chevron felt it was necessary to own additional or possess additional land in order to dispose of its waste rock, correct?
- A. The mining claim is patented because there is mineral there. And in general, mining companies don't like to put waste upon their mineral land. They don't like to move waste twice.
- Q. So Chevron felt it needed additional land in addition to that area so it wouldn't have to move the waste rock twice, correct?
 - A. Exactly.
- Q. And another reason, perhaps, that Chevron needed or wanted different land was it was concerned with changes to the mining laws, at that time?
- A. I don't think that had any bearing on the need for additional land.

The mining operation is what determines whether they needed additional land.

- Q. A factor -- would you agree that a factor going into the consideration to own the land was the possible changes in the mining laws?
 - A. Yes, there -- that's the -- no doubt.
 - Q. So another idea that Chevron had was to apply for special use permits to dump the waste rock on these lands; is that correct?
 - A. I believe there is something in the record that said that Molycorp was pursuing a long-term special use permit.

There was a lot of previous records that showed that it was really -- the Forest Service considered long-term special use permits. A lot of back and forth between the four supervisors' office and the regional office, well, should we issue special use permit or not issue special use permits. There are -- there are a half of -- so I suspect that is what that report was talking about, that it was a Forest Service idea and so they were pursuing that, at one time.

- Q. Do you recall Mr. Dewey's testimony yesterday about Chevron was reluctant to use a special use permit or apply for a special use permit?
- 25 A. Yes. 0310

1 Q. And some of the reasons that were

- expressed were because the special use permit could be withdrawn by the Forest Service, correct?
 - A. That is right, they are discretionary.
 - Q. And it could also require restoration of the land?
- A. Yeah, I would assume that they could put any kind of stipulation you want in a special use permit.
- MR. HARRISON: If we could show CX204 and pages one and two.
- A. But, that was -- that was -- a special use permit was not the preferred method for the land, you know, prior to the land exchange.
- Q (By Mr. Harrison) The preferred method for Chevron or for the Forest Service?
 - A. For the Forest Service.
- Q. But isn't it true that it also wasn't the preferred method for Chevron?
- If we look at the top of page two here, do you see the sentence that says, "We are reluctant to reserve special use permits if they can be avoided"?
 - A. Yes, absolutely.
- Q. And the reasons explained there were the same reasons that Mr. Dewey testified about 0311
- 1 yesterday, correct?

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- A. That is correct. And it was also the position of the Forest Service not to issue special use permits for waste disposal.
- Q. And Chevron never applied for a special use permit?
 - A. They did not.
- Q. So another way for Chevron to acquire the land was for -- for the -- needed for the waste rock was to stake and patent mining and mill site claims in the area adjacent to the open pit; is that correct?
 - A. That is correct.
- Q. And Chevron had staked mining and mill site claims in almost all of that area, prior to the 1968 time period?
 - A. Absolutely.
- 18 Q. Encompassing something like 2,000 acres or 19 more of land?
- A. Well, just adjacent to the mining up area, that's correct.
- Q. Are you aware that in 1971 Chevron estimated that it was only using about 400 acres of that area for dumping waste rock?
- 25 A. Yes, I am. The Washington office of the 0312
 - 1 Forest Service asked the regional office in

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Albuquerque to -- to determine the amounts of land
that were being used by mining in the area. That
was -- that request was made to Molycorp and
Molycorp responded that it was around 400 acres that
were currently being used for waste disposal on
Forest Service land.
```

- Q. And as part of that process, are you aware of internal communications at Chevron that said that they still require all of the lands involved in the land exchange, not just the acres involved in current dumping?
 - A. That's correct.
- Q. And just so we are clear, we are talking about the area around and adjacent to the open pit, not anything on the other side of the highway and river, correct?
- A. That is correct. By that time it was -- it was clear that they weren't going to be using the other side.

MR. HARRISON: So let's go back to CX204. This is a July 26, 1968 letter.

If you can show the first paragraph,

24 please.

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0313

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0314

Q (By Mr. Harrison) I will give you a second

to read this and then I will ask you a question.

A. Okay.

Q. So this is a letter from John Watson, who is one of Chevron's counsels, to vice president at Chevron, Mr. Kentro.

Mr. Watson notes at the outset here that there are -- the mining claims have, quote, "doubtful discoveries."

Do you see that?

- A. I do.
- Q. And so you can't patent mining claims without mineralization, correct?
 - A. Absolutely right.
- Q. And so, in order for Chevron to acquire this land through the Mining Act patenting process, they would need to withdraw the mining claims and stake those as mill sites, correct?
- A. You wouldn't necessarily -- you wouldn't necessarily have to withdraw the mining claims. You could -- so you could still have mill sites on mining claims. It is no big deal.
- Q. And for the mill sites to be patented, Chevron would need current use at the time of the patent application for each of those claims?
- 25 A. That's correct.

1 Q. And Mr. Watson acknowledges that in this

letter as well, in the second paragraph?

```
3
               That is right.
         Α.
 4
         Ο.
               And at the time of this 19 --
               A mill site has to be presently used and
 5
         Α.
 6
     occupied for those purposes, and that is what he was
 7
     stating there.
               And later in this letter, the third
 8
 9
     paragraph on the second page, Mr. Watson expresses
10
     concern about the lack of present use and occupation
     for these proposed mill sites.
11
12
               Do you see that?
13
               Yes.
         Α.
14
               To patent a mill site, the mining law
15
     requires that the mill sites not exceed 5 acres; is
16
     that correct?
17
         Α.
               Yes.
18
               Like you said, it also requires a current
         Q.
19
     use, not a future use or a planned use?
20
        Α.
               That is correct.
21
               So is it fair to say that these legal
         Q.
22
     requirements for the mill sites presented a
23
     challenge for Chevron if it wanted to apply for
24
     patents on these claims?
25
         Α.
               Well, if they weren't being presently used
0315
     and occupied, it would be a challenge.
 1
 2
               And to get around that challenge, you
 3
     heard Mr. Dewey testify yesterday that Chevron,
     quote, "devised a plan that worked around," end
 5
     quote, the mill cited law.
 6
               Do you recall that testimony?
 7
         Α.
               I do.
 8
         Q.
               And that was the fan-shaped mill sites
9
     that were -- would run from the area near the open
     pit down to the highway, correct?
10
11
         Α.
               I do, yes.
12
               MR. HARRISON: If we could show CX216 at
13
     page three.
14
              (By Mr. Harrison) These are the fan-shaped
15
     mill sites referenced by Mr. Dewey and in the
16
     July, 1968 letter?
17
         Α.
               Yes.
18
               And this is the area adjacent to the open
19
     pit up to the highway?
20
        Α.
               Or down to the highway.
21
               Or down to the highway, yes.
         Q.
22
         Α.
               Sure.
23
               And so if this was found permissible, that
24
     would have allowed Chevron an easier time claiming
25
    use on the mill sites so that they could patent
0316
    them; is that correct?
 1
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You know, it was a pretty innovative idea
     to think about, is that if you just put some waste
     on the top part of the mill site and it extends all
     the way down past the road, then you are occupying
 5
 6
     the entire mill site. It was kind of a funny way to
 7
     do it.
 8
               But that is not consistent with the
 9
     requirements of the mining law, is it?
10
               You know, I think that is a question
     because the mining law just talks about, you know,
11
12
     5 acres in size.
13
               What the Forest Service and the BLM prefer
14
     is that they be in, you know, 5-acre chunks,
15
     according to the rectangular survey system that is
16
     preferred.
17
               But I don't think there is anything in the
18
     mining law that says that has to be that way.
19
               Are you aware of any other set of mining
20
     or mill site claims that Chevron located at the
21
     Questa site that were fan-shaped or non-rectangular
22
     in shape?
23
         Α.
               No. No, I am not.
24
               And they located almost, if not over,
25
     1,000 mill site and mining claims?
0317
               Well, I think a small number of mill
 1
         Α.
 2
     sites, the tremendous amount of those load claims
 3
     compared to mill sites.
               So Chevron was looking for an easier way
 4
         Q.
 5
     to simplify the patenting process by coming up with
 6
     the fan-shaped narrow mill site claims, correct?
 7
               They were thinking of an innovative way to
         Α.
 8
     do it.
 9
               THE COURT: Did they put waste all over
10
     those lines?
11
               THE WITNESS: Pardon me, Your Honor?
12
               THE COURT: Did they put waste all over
13
     those mill site lines?
14
               THE WITNESS: Eventually. These were
15
     never -- these were never staked as mill sites.
16
     This was a sketch that was developed by Molycorp.
17
               THE COURT: Was this before any patents
18
     were issued?
19
               THE WITNESS: Absolutely.
20
              (By Mr. Harrison) So this letter was
21
     July, 1968.
22
               Let's fast forward a few months to
23
     January, 1969.
24
               We have heard a lot about this
25
     January, 1969 meeting between Chevron and the Forest
0318
 1
     Service.
```

```
And you heard that testimony in court,
 3
     correct?
 4
         Α.
               Yes.
 5
               And the major topic of the meeting seemed
 6
     to be this idea of a Red River Canyon tunnel fill
 7
     idea, correct?
 8
         Α.
               That is right.
 9
         Q.
               Do you agree that this would have been a
10
     major project?
11
        Α.
               Absolutely.
12
               Would it have required extensive design
         Ο.
13
     and planning?
               Absolutely.
14
         Α.
15
               Permitting from various governmental
         Ο.
16
     entities?
17
               I don't know all the extent of the
     permitting that would be required from the state.
18
19
     just don't know.
               But permits, in your experience, with a
20
21
     project like this, permits would be required?
               Well, if they are required, they are, but
22
23
     I have no knowledge of what permits might be
24
     required in that case.
               And would it have involved -- would a
25
         Q.
0319
     project like this have necessarily involved seeking
 1
 2
     public input and feedback, as well?
               It could have, sure. Yeah.
         Α.
 4
         Q.
               And if -- strike that.
 5
               So at the January, 1969 meeting, the
 6
     Forest Service suggested a land exchange, correct?
 7
               No. It was the Forest Service that
     suggested the land exchange.
 8
 9
               I think I said that but if I didn't, then
         Q.
10
     I misspoke.
11
         Α.
               Okay.
12
         Q.
               And Chevron agreed to prepare a map of the
13
     selected and offered lands following that meeting?
14
         Α.
               That is correct.
15
               And Chevron never presented a formal
         Q.
16
     application to the Forest Service? Well, anything
17
     relating to the Red River -- Red River plan?
               THE COURT: Well, are we going to go into
18
19
     that proposed Red River overpass?
20
               MR. HARRISON: No, Your Honor. I have a
21
     few more questions on that before I get to a --
22
               THE COURT: Why do you have any questions
23
     on that?
24
              (By Mr. Harrison) In your direct testimony,
25
     you took issue with the fact that the Forest Service
0320
 1
     never undertook an analysis of the Red River Canyon
```

```
idea; is that correct?
 3
         Α.
               That's correct.
 4
               But, there was no way for them to do that
 5
     without a formal submission?
               THE COURT: Counsel, why are you going
 6
 7
     there? I want you to move on. We have exhausted
 8
     that topic.
 9
              (By Mr. Harrison) Let's go back to the
         Q
10
     communications following the January, 1969 meeting.
               So three weeks after that, Chevron's
11
12
     lawyer wrote to the Forest Service to make
13
     application for the land exchange.
14
               Are you aware of that?
               I am aware of correspondence, yes.
15
16
               And from that point forward, Chevron was
17
     fully intent on proceeding with the land exchange,
18
     correct?
19
         Α.
               It was pretty urgent to proceed with it.
     They needed that -- that land for the waste
20
21
     disposal.
               MR. HARRISON: If we could show CX212.
22
23
               So this is the February, 1969 letter we
24
     were just discussing.
25
               If we could turn to the top of page two.
0321
     And this letter, again, is from Mr. Watson,
 1
 2
     Chevron's counsel.
 3
              (By Mr. Harrison) And it says that "Parcels
     one and two are practically covered with load-mining
 4
 5
     claims."
 6
               Do you see that?
 7
         Α.
               Yes, sir.
               And parcels one and two, just so we are
 8
9
     all clear, are for the -- the areas that ultimately
10
     ended up becoming the land subject to the land
     exchange, correct?
11
12
         Α.
               Yes.
13
               And then a few sentences down, it says,
         Q.
     "In this same general area are two other claims, the
14
15
     Sugarloaf and Magnifico, which belongs to other
16
     persons."
17
               Do you see that?
               MR. HARRISON: If we could just zoom back
18
19
     out, please. If we could go to the last paragraph.
20
              (By Mr. Harrison) Mr. Watson writes that
     those who attended the meeting are, quote,
21
     "Sincerely appreciative of your suggestions, and
22
23
     thank you for your consideration of this matter."
24
               Do you see that?
25
         Α.
               Yes.
0322
1
         Q.
               There is nothing here to suggest that the
```

meeting wasn't amiable or that -- not friendly?

```
3
         Α.
               I think it was professional.
 4
         Ο.
               And so the Forest Service responded to
 5
     Chevron's letter in April of 1969.
 6
               Are you aware of that?
               I am sure they did.
 7
         Α.
 8
               MR. HARRISON: If we could show CX216,
 9
    please.
10
              (By Mr. Harrison) Looking at the third
11
    paragraph on the first page, the first sentence
12
    says, explains that "Unpatented mining claims would
13
     either have to be relinquished or adjudicated."
14
               Do you see that?
15
               Yes.
         Α.
16
               And by adjudicated, that means through a
         Q.
17
    validity contest?
18
         Α.
               That's correct.
19
               And that makes sense that in order for the
20
    United States to be able to convey the land, it
21
    needed clear title on that land?
22
               That is correct.
23
         Q.
               So if Chevron did not want to relinquish
24
    the claims, they could have proceeded with the
25
    validity contest to clear those claims, the mining
0323
1
    claims, from the land?
               If they didn't want to relinquish the
    claims, they could go through a validity contest
    is --
 4
 5
         Q.
               Yes.
 6
         A.
               -- that what you are asking?
 7
         Q.
               Yes.
 8
               They would want to contest their own
        Α.
9
     claims, is that what you're asking?
10
         Q.
               I'm just asking what the letter says in
11
     that respect with regard to the first sentence here.
12
               The first sentence says, you've got two
13
     options, you can relinquish them or we can challenge
     them in a validity contest.
14
15
               In order for the land exchange to
         Q.
16
    continue?
17
         Α.
               Correct.
18
               So that was a choice that Chevron could
19
    have made. They could have, instead of
20
    relinquishing them, could have offered to go through
21
     the validity contest?
22
               They would ask for a validity contest with
         Α.
23
     their own claims? I guess they could have, sure.
24
               And the relinquishment is held in escrow,
         Ο.
25
    correct?
0324
1
        A. Evidently.
```

And if you would look about halfway down this paragraph, it says, "The relinquishments are not recorded or made a public record until the land exchange has reached the point of patent in the respective land."

Do you see that?

Α. I do.

4 5

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- And just again, so we are clear, we are Q. talking about this land exchange is for the area adjacent to the open pit mine, nothing across the river or on the other side of the river?
 - That's correct.
- And in this letter, the Forest Service Q. also expressed some concerns of Chevron's proposing of the fan-shaped mill sites; is that correct?
- I would have to look further down the Α. letter.

MR. HARRISON: If we could go to the top of the last -- the last paragraph of page one, top of page two.

- Α. Yes, it is in there.
- Q (By Mr. Harrison) And I think you testified earlier that whether or not the permissibility or whether or not it was permissible to use fan-shaped 0325
 - mill site was a question?
 - A. Correct.
 - And the Forest Service also notes here Q. that, quote, "The shape of the mill sites, as proposed by Molycorp, is also a matter of concern." Do you see that?
 - I do. Α.
 - And this is in addition to the concerns Q. that Chevron's lawyers had already raised for itself, to Chevron's employees about the active and current use of mill sites, in order to have those patented, correct?
 - Α. Correct.
 - Your testimony is that this letter from the Forest Service threatened Chevron by suggesting a friendly validity contest.

Is that still your testimony?

- Yes. Α.
- But isn't it more the case that the Forest Ο. Service is just ensuring that it is acting in compliance with its -- with the laws and regulations?
- 23 Well, of course, the Forest Service and 24 federal government acts in compliance with its laws 25 and regulations. There is no doubt about that. 0326
 - Q. If there was a question, like you said,

```
about the propriety of using the mill site claims in
 3
     the fan-shaped manner that Chevron is proposing,
     that would be something that would need to be
 4
 5
     necessarily resolved, correct?
 6
               That, and the fact that there are fan
 7
     shapes of mill sites would have to be resolved.
 8
               You testified that a validity contest
 9
     would take many years to resolve; is that correct?
10
               Yes, I testified to that, and so did the
     Forest Service 30(b)(6) witness.
11
12
               And so CX216 is dated April 18, 1965.
13
               If we go forward just a week -- a little
14
     more than a week later, Chevron also suggested that
15
     the Forest Service initiate a validity contest
16
     related to issues of the land exchange?
17
         Α.
               Correct.
               MR. HARRISON: It is -- we can -- can we
18
19
     show CX218?
20
              (By Mr. Harrison) So this is an April 30th
21
     letter from Chevron's counsel to the Forest Service.
22
               Do you see that?
23
               THE COURT: Yeah, 1969?
24
               MR. HARRISON: 1969.
25
               I see the first page of it.
        Α.
0327
               MR. HARRISON: So if we can turn to the --
 1
 2
     the second page, the first full, the paragraph
 3
     beginning with Mr. Koen.
              (By Mr. Harrison) This refers to the
 4
 5
     April 18th letter that we were just looking at?
 6
         Α.
               Yes.
 7
               And it says here -- I will give you a
 8
     minute to read it.
9
         Α.
               Okay, got it.
10
         Q.
               So this letter, just barely a week later,
     Chevron is suggesting to the Forest Service that it
11
12
     initiated a validity contest related to the land
13
     exchange, correct?
14
               On -- I guess on mining claims that it did
         Α.
15
     not own.
16
               And Chevron also inquired in this
17
     letter -- if we turn to the next page, first full
     paragraph -- "To avoid the situation, Chevron also
18
19
     inquired as to whether the Forest Service would
20
     initiate a quiet title action related to those
21
     mining claims that were not Chevron's."
22
               Is that correct?
23
               That were not Molycorp's, yes.
         Α.
24
               And Chevron wanted or needed these mining
         Q.
25
     claims and title quieted so that the land exchange
0328
     could be -- the land subject to the land exchange
```

```
could be conveyed with clear title, correct?
 3
         Α.
               That's correct.
 4
         Ο.
               And this letter also closes with "Permit
     us to thank Mr. Parte and Mr. Ashby for your
 5
 6
     kindness and cooperation in this matter."
 7
               Do you see that?
 8
               I do.
         Α.
9
               "And the tone is professional and
         Q.
10
     friendly"?
11
         Α.
               Absolutely.
12
         Ο.
               And so throughout the rest of 1969 and the
13
     following year, Chevron expressed continued interest
14
     in finalizing the land exchange, correct?
15
               They had to have it.
         Α.
16
               MR. HARRISON: If we could go to USX34.
17
              (By Mr. Harrison) This is Chevron's formal
18
     land exchange application.
19
               Do you see that?
20
         Α.
               Yes.
21
               MR. HARRISON: And the transmittal letter
22
     is actually on pages five and six, so if we could
23
     show those.
24
              (By Mr. Harrison) And it is dated
25
     November 5th, 1969?
0329
 1
         Α.
               Yes.
 2
               MR. HARRISON: If we go to page six, first
 3
     full paragraph.
              (By Mr. Harrison) It notes here that
 4
 5
     "Chevron will relinguish the unpatented mining
     claims when the land exchange is consummated."
 6
 7
               Do you see that?
 8
               I do.
         Α.
               And it is the future tense here, "when the
9
10
     exchange is consummated and will relinquish."
11
         Α.
               That's correct.
12
               And it again closes at the end with "Thank
13
     you again for your and your staff's assistance and
14
     cooperation in this matter."
15
               Do you see that?
16
               Yes, I do.
         Α.
               MR. HARRISON: I would move for the
17
     admission of USX34.
18
19
               THE COURT: Any objection?
20
               MR. HARRISON: No objections, Your Honor.
               THE COURT: Without objections.
21
22
               (Exhibit admitted, USX34.)
               MR. HARRISON: If we could show CX235.
23
24
              (By Mr. Harrison) This is an April 30th,
25
     1970 letter to Molycorp's general manager, Colin
0330
1
     Campbell, from the Forest Service; isn't that
```

```
correct?
 3
         Α.
               Yes.
 4
         Q.
               Have you seen this document before?
 5
         Α.
               I have.
 6
               MR. HARRISON: Your Honor, I would move
 7
     for admission of CX235.
 8
               THE COURT: Any objections?
 9
               MR. HOPSON: No objections.
10
               THE COURT: Without objections, it is
11
     admitted.
12
               (Exhibit admitted, CX235.)
13
              (By Mr. Harrison) And if we look at this,
14
     the first sentence says that "It would be necessary
15
     for Molycorp to relinquish the mining claims prior
16
     to the issuance of a patent."
17
               Do you see that?
18
         Α.
               Yes.
19
               And then the second sentence of the second
20
     paragraph says that "The Forest Service will keep
21
     the relinquishment in escrow until we know that the
22
     patent will issue."
23
               Do you see that?
24
         Α.
               That is correct.
                                 That's what it says.
25
         Q.
               And again, here it is future tense, will
0331
     relinquish. And it does not suggest anything that
 1
 2
     the claim had actually been relinquished, correct?
 3
               Well, I don't think they had been
     relinquished, at this time.
 4
 5
               Nothing to suggest here that the claims
 6
     would be relinquished until the exchange was
 7
     consummated, correct?
               That is what this letter says.
 8
 9
               Do you have any reason to dispute that
10
     that was the process by which the relinquishment
     happened as part of this land exchange?
11
12
               The Molycorp did relinquish the claims.
13
     Was signed by the general manager, I guess, that
14
     Molycorp notarized and given to the Forest Service.
15
               Whether or not that relinquishment, I
16
     quess you can -- you can arque whether a
17
     relinquishment that was signed and notarized was a
18
     relinguishment or not.
19
               So the other side of the land exchange
         Ο.
20
     deal, Chevron provided offered lands to the
21
     United States, correct?
22
               That is correct.
         Α.
23
               Are you aware that in 1972 Chevron
         Q.
     provided a warranty deed for the offered lands?
24
25
         Α.
               Yes.
0332
 1
         Q.
               And the land exchange was finalized in
```

```
1974?
 3
        Α.
               That is correct.
 4
         Q.
               Is it your testimony then that the
 5
     United States owned the warranty deed for the --
     owned the land, the offered lands, in 1972 prior to
 6
     the consummation of the land exchange, simply
 7
 8
     because Chevron provided the warranty deed?
 9
               I don't know. I have not really
10
     researched that, to be honest about it.
11
               Chevron didn't do anything between the
12
     time of the relinquishment in May, 1970 to the
13
     finalizing of the land exchange in January of 1974
14
     to suggest that they didn't feel like they had the
15
     right of access to that property, correct?
16
               That's correct.
         Α.
17
               Chevron continued to dump waste rock on
18
     the land exchange while the land exchange was
19
     pending, correct?
20
         Α.
               For sure.
21
               Would you say it was business as usual?
         Q.
22
         Α.
               I don't think any mining operation is
23
     really business as usual.
24
               MR. HARRISON: If I could show CX306.
               So this is part of the land exchange file.
25
0333
     If we could go to page 168, the May 20th, 1970
 1
 2
     letter.
 3
              (By Mr. Harrison) Have you seen this letter
         0
     before?
 4
 5
        Α.
               I have.
 6
               MR. HARRISON: Your Honor, I would like to
 7
     move for admission of CX306.
 8
               MR. HOPSON: No objection.
               THE COURT: Thank you.
 9
10
               Without objection, it will be admitted.
11
               (Exhibit admitted, CX306.)
12
              (By Mr. Harrison) And this is a letter from
13
     Chevron's counsel to the Department of Agriculture,
14
     the Forest Service?
15
               Yes.
         Α.
16
              If we look at the second paragraph here,
17
     it says, "We understand that you will hold the
     enclosed relinquishment until you are assured by the
18
19
     BLM that patent will issue in a few days to the
20
     selected lands involved in the land exchange."
21
               Do you see that?
22
         Α.
               Absolutely.
23
               Again, it is future tense here, will hold
     until you are assured, correct?
24
25
        Α.
               Correct.
0334
1
         Q. And we discussed this earlier, there was a
```

```
reference to two outstanding mineral claims that
     Chevron did not possess as part of the land
 4
     exchange. I believe those were the Sugarloaf and
     the Magnifico.
 5
 6
               Do you recall those?
 7
         Α.
               Yes.
 8
               Were those ultimately removed from
         Q.
 9
     Chevron's land exchange proposal and later patented
10
     in the 1980s?
               That's correct.
11
         Α.
12
               So around the same time or -- excuse me.
         Ο.
13
               In 1971, as part of the land exchange, the
14
     Forest Service prepared an environmental analysis.
15
               Are you aware of that?
16
               Yes.
        Α.
17
               MR. HARRISON: If you could show CX281.
18
              (By Mr. Harrison) And this is the 1972
19
     Environmental Analysis.
20
               Have you seen this document before?
21
               I have.
         Α.
22
               And this was prepared as a result of the
23
     requirements under the National Environmental Policy
24
    Act of 1970, correct?
25
         Α.
               Yes.
0335
               Also, called NIPA?
 1
         Ο.
 2
         Α.
               Yes.
               If we could turn to page 17, in the middle
         Ο.
     paragraph that starts, "With Jack Watson from
 5
    Molybdenum Corp., explained that the company
 6
     prepared to exchange the land rather than acquire
 7
     them through mill site applications."
 8
               Do you see that?
 9
         Α.
               Well, this was not in the EA unit, right?
10
         Q.
               Correct. This is part of a transmittal
     letter transmitting the EA, I believe.
11
12
               This has -- this is not a transmittal
13
     letter.
14
               Excuse me, a memorandum to file.
         Q.
15
         Α.
               Okay. Granted.
16
               Thank you.
         Q.
17
               MR. HARRISON: If we could go -- now let's
     look at the Environmental Analysis. If we could go
18
19
     to page six, please, under "Adverse Environmental
20
     Effects Which Cannot Be Avoided."
21
               Do you see the sentence in the first
22
     paragraph that says, "The mining activities will
23
     still continue on the patented mining claims or on
     mill sites and are not dependent upon approval or
     disapproval of this land exchange proposal"?
25
0336
        A. I do.
1
```

```
Do you agree with that assessment?
         Q.
         Α.
               Not exactly.
 4
               And the reason I don't agree with it is
    because it was the Forest Service that disapproved
 5
    of the use of mill sites. That is the whole purpose
 7
    of this exchange and subsequent EA.
 8
               So just to finish, the land exchange
 9
    timeline, the Forest Service approved the
10
     environmental analysis in February 1972, correct?
11
               That is correct.
12
         Ο.
               And then throughout the rest of 1972, the
13
    Forest Service approved the land exchange and
14
     instructed Chevron on next steps?
15
               Well, the land exchange was consummated in
        Α.
16
     1974, yeah.
17
        Q.
               So I don't understand your question.
18
         Α.
19
               I will strike that.
20
               So after this -- so the land exchange was
21
    finalized in January of 1974, correct?
22
         Α.
               That's correct.
23
         Q.
               A month after the land exchange, Chevron
24
     attempted or Chevron sought to protect their mining
    operations by locating more mining claims in the
0337
 1
    area; is that correct?
 2
        Α.
             Absolutely.
               And the reason -- the reason for that is
         Q.
    so that their claims, the land that they owned and
 5
    possible claims were contiquous?
               That is true.
 6
         Α.
 7
               And that would be done so Chevron would
         Q.
    not have to deal with issues of --
 8
9
               Claim jumpers.
         Α.
10
         Q.
               Which we have talked about already.
11
         Α.
               Right. And this is the area just
12
     contiguous to the exchange boundary.
13
               Right.
         Q.
14
               The little block?
15
               That's right.
         Α.
16
               Exactly.
         Q.
17
               So the land exchange, Chevron received the
    same land that it would have received if it had gone
18
19
    through the patenting process; is that correct?
20
         Α.
               If they were allowed to have gone through
21
    patenting, I quess.
22
               And even if Chevron had decided to apply
23
     for patenting and was allowed to do so, Chevron
     would have still continued dumping waste rock on
25
    these areas; is that correct?
0338
```

A. No, not exactly. I think that is what

```
Dr. Rigby was talking about. If -- if Molycorp was
     allowed to have their mill sites in the way they
     wanted to, it would have been a totally different
 4
     configuration of the waste dumps.
 5
 6
               But what we have talked about today with
 7
     these letters and the mill sites is for mill sites
 8
     on areas adjacent to the open pit and on the north
 9
     side of the river and highway.
10
               We haven't talked about anything going
     across the river and highway or on the other side,
11
12
     correct?
13
               We haven't but the Forest Service and
         Α.
     Molycorp did.
14
15
              All right. Let's switch gears. I have
16
     just a few more things, and talk about Chevron's
17
     second underground blockade mine.
               That began in the mid-1970s, that
18
19
     development?
               I think that is correct.
20
         Α.
21
               And that was on land that Chevron owned
         Q.
22
     outright?
23
         Α.
               I am not 100 percent sure on that.
24
               There were patents issued after that, I
25
     think -- well, maybe -- I would have to look at the
0339
     maps but you may be correct.
 1
 2
               The United States was not involved in
     Chevron's decision to explore for developer operate
     the new underground blockade mine, correct?
 5
               No, that was a Molycorp decision.
               You testified that the federal government
 6
         Q.
 7
     wanted the Questa Mine developed in order to help
     spread economic development in Northern New Mexico;
 8
9
     is that correct?
10
         Α.
               Yes.
11
         Q.
               Is there anything wrong with that policy?
12
         Α.
13
               The federal government helped private
         Q.
14
     entities and individuals all the time, correct?
15
         Α.
               Correct.
16
               And when it does, it is supposed to be in
         Q.
17
     the public interest?
18
         Α.
               Yes.
19
               And advance the interest of the
         Ο.
20
     United States?
```

A. Yes.
Q. So it is not your testimony that the federal government's interest in promoting economic

development was improper, is it?

A. No, just the opposite.

21

22

23

24

1

Q. And Chevron was a beneficiary of that

```
policy, agreed?
 3
         Α.
               Agreed.
 4
         Ο.
               So if -- just to wrap up, so if the United
     States had restricted or withdrawn any of Chevron's
 5
     mining claims or rights on the federal lands at
 6
 7
     issue here, would that have been improper?
 8
         Α.
               Would you repeat that, please?
 9
               Sure. Let me rephrase.
         Q.
10
               If Chevron had restricted Chevron's mining
     rights, would that have constituted a taking?
11
12
               You mean if the federal government had
13
     restricted Chevron --
14
         Q.
               Yes.
15
               -- or Molycorp's?
         Α.
16
               MR. HOPSON: Objection. Calls for a legal
17
     conclusion.
18
               THE COURT: Sustained.
19
              (By Mr. Harrison) You testified in your
20
     direct that you felt that it may constitute a
21
     taking; is that correct?
22
         Α.
               I would have to look at the exact words
23
     from that.
24
               MR. HARRISON: Could we show Fredley
25
     Direct 101, please.
0341
              (By Mr. Harrison) The answer at the bottom
 1
 2
     of the page, it says, "Question: But these laws
     don't let that kind of incident, patented claims or
 3
     mining claims, with a mineral fine, do they?
 4
 5
               "Answer: No, generally not."
 6
               Do you see that at the bottom?
 7
               Yes.
         Α.
               And you say, "It doesn't want to effect a
 8
         Q.
9
     taking, which could be very costly for the
10
     United States."
               MR. HOPSON: Objections, Your Honor.
11
12
     is referencing the Wilderness Act and a
13
     congressional policy here. This has nothing to do
14
     with the analogous situation of taking away
15
     Chevron's mining claims.
16
               THE COURT: And where are you going with
17
     this?
               MR. HARRISON: I will move on, Your Honor.
18
19
              (By Mr. Harrison) Chevron exploited the
20
     federal lands for its commercial gain, correct?
21
               THE COURT: What do you mean by
22
     "exploited"?
23
               MR. HOPSON: Used it to benefit it
24
     commercially as part of its business.
25
        Α.
               Yes.
0342
 1
              (By Mr. Harrison) Chevron sought out the
```

- United States' assistance so it could further develop its mining operations; is that correct?

 A. That is correct. And the federal
 - government provided that assistance.
 - Q. And you have testified today and previously that you take no issue with the Government's actions in respect to many of those actions; is that correct?
 - A. That's correct.
 - Q. Chevron approached the United States in every one of those instances, correct?
 - A. That is correct.
 - Q. Chevron freely availed itself with every opportunity provided to it under the mining laws and regulations of the United States, correct?
 - A. Molycorp did.
- Q. Just so we are clear when we are discussing Chevron today, it also means Molycorp and the predecessors?
 - A. Fair enough.
 - Q. Chevron entered federal lands without paying anything, correct?
- A. Depending on the time frame, that is correct.
- 0343

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22

23

- Q. Chevron extracted minerals without paying any royalties to the United States, correct?
 - A. Correct, except for the DMEA royalties.
- Q. And we discussed those, that it was a repayment -- interest-free repayment of the loan amount, correct?
 - A. As a result of discovery, that is correct.
- Q. And we talked today about how Chevron treated the lands, as if they were their own with fences, security gates, security guards and whatnot, correct?
- A. We discussed that, and I believe that the fences and the security gates that you may be talking about, were on private land since 1924.
- Q. We looked at documents today where Chevron called the land its own and part of its land holdings, correct?
- 18 A. That is, you know, somebody says, I own a 19 mining claim, okay? Fair enough.
- 20 Q. Chevron decided which claims -- strike 21 that.
- 22 Chevron was the one who decided which of 23 its mining and mill site claims to apply for patents 24 on, correct?
- 25 A. Yes.

0344

Q. And the United States, in all of these

```
interactions, was simply responding to Chevron's
 3
     request, correct?
 4
         Α.
               For patent?
 5
         Q.
               Yes.
 6
               Yes.
         Α.
 7
               And in respect to the special use permit
         Q.
 8
     for the tailings pipeline, the United States would
 9
     simply respond to Chevron's request for a permit,
10
     correct?
11
               THE COURT: You are not going repeat
12
     everything you already asked, are you?
13
               MR. HARRISON: No, Your Honor. Just a few
14
     more questions.
15
               THE COURT: It is almost 12:00. I hope
16
     you are done by then.
17
               MR. HARRISON: We will be done by lunch?
18
         Α.
               Yes.
19
              (By Mr. Harrison) So in many respects, it
20
     was inevitable for the United States to interact
21
     with Chevron given that Chevron was mining on
22
     federal lands; is that correct?
23
         Α.
               For sure.
24
         Q.
               And there is no legal reason why the
25
     United States could have shut down Chevron's mining
0345
     operations; is that correct?
 1
 2
         Α.
               There is no reason they would have.
 3
               MR. HARRISON: With the Court's
 4
     indulgence, just one minute.
 5
               THE COURT:
                          Thank you.
 6
               MR. HARRISON: No further questions.
 7
               THE COURT: We will pick up redirect after
 8
     lunch.
 9
               We'll be in recess until 1:30.
10
               (A recess was taken.)
11
               THE COURT: Good afternoon. You may be
12
     seated, and you may begin.
13
               MR. HOPSON: Thank you, Your Honor.
14
                     REDIRECT EXAMINATION
15
         BY MR. HOPSON:
16
               Good afternoon. Remember to speak into
17
     the microphone, Mr. Fredley, okay?
               Yes, sir.
18
         Α.
19
               So do you recall Mr. Harrison asking you
         Ο.
20
     quite a few questions about the mining laws?
21
               Yes.
22
         Q.
               I want to jump to the bottom line here and
23
     get your opinion as a historian and an expert in
     mining on Federal lands and just ask you generally
25
     was it U.S. policy, at least prior to 1975, to
0346
 1
     support and encourage mining on public lands?
```

- A. Absolutely. The title of the 1872 mining law is an act to promote the development of mineral resources of the United States, and that policy continued all the way through to the 1970s.
- Q. Focusing on the Questa site specifically, did the Forest Service and other agencies in the United States Government specifically support, encourage and enable the open pit mine at Questa?
 - A. Absolutely.

7

8

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11

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0347

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12

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19

20

- Q. Can you tell the Court briefly your understanding from the historical record of the reasons why they supported the open pit mine?
- A. Several reasons. Number one, it was providing strategic minerals to the United States. It was providing employment to the local communities, it was a valuable resource.
- Q. Let me ask you this, and we will move on. Without the U.S. Government's support, cooperation and encouragement, could open pit mining at Questa have occurred?
 - A. No.
- Q. Do you recall the additional questions about whether the United States retains an interest in or the ability to control lands that have
- unpatented mining claims?
 - A. Yes.
 - Q. Did the U.S. Forest Service send Molycorp a bill for the value of certain timber that was destroyed when waste rock was placed on unpatented mining claims?
 - A. I have seen that record.
 - Q. Does that suggest to you that the United States continued to have an interest and ability to control land that has unpatented mining claims?
 - A. Absolutely. It was Federal land under Federal control.
- Q. There was a question, as I recall, whether the Forest Service objected to the fan-shaped claims and that was the basis for rejecting the valley fill plan.

 Do you remember that question or

Do you remember that question or questions?

- A. Yes, I do.
- Q. Do you recall that Mr. Dewey testified that Molycorp actually staked fan-shaped mill side claims in the Capulin Canyon?
- 24 A. Yes.
- Q. Did the Forest Service object to those 0348
- 1 fan-shaped claims?

```
No. The only claims of any shape that the
     Forest Service objected to were the ones involving
 4
     the cross river area.
 5
               And was there reason for objecting to
 6
     those, the shape of the mill site claims?
 7
               At the cross river area because they
     didn't want Molycorp have mill sites across there
 8
 9
     and develop their first proposal for a cross river,
10
     crossroad waste dump.
11
               I want you to focus for a minute on the
12
     land that Molycorp obtained in the land exchange.
13
     And I just want to ask you this question: Prior to
14
     January '74 when the land exchange was consummated,
15
     who owned that land?
16
               Federal Government.
         Α.
               Did the fact that mining claims were
17
18
     relinquished or in escrow change that in any way?
19
               Absolutely not.
20
               MR. HOPSON: I would like to turn,
21
    Ms. Hutchman, to U.S. Exhibit 520.
22
               (By Mr. Hopson) Which I will tell you,
23
    Mr. Fredley, is the 1956 report to stockholders with
24
    Molycorp.
25
               MR. HOPSON: And if we could go to Page 4
0349
    of that, I believe it is the last page. And if you
 1
     could please blow out the fourth paragraph from the
    bottom.
 4
         Q.
               (By Mr. Hopson) Which you were shown by
 5
    Mr. Harrison during your cross-examination.
 6
               Do you recall reading that?
 7
               Yes.
         Α.
 8
         Q.
               Mr. Harrison pointed out that this was
9
    prior to the execution of the DMEA contract,
10
     correct?
11
         Α.
               That is correct.
12
               But when, in fact, did Molycorp apply for
         Q.
13
     the DMEA loan?
14
               Several months prior to this document.
         Α.
15
               This document is dated December 31st, I'm
         Q.
16
     sorry, that is the year it is reporting. It is
     dated March 14, 1957. It is reporting on the year
18
    1956.
19
               Do you recall when the DMEA contract was
20
```

actually executed?

May 1957.

- So was the DMEA contract well underway by Q. the time this report was written?
- Pretty much. 24 Α.

25 MR. HOPSON: Let's please call up,

0350

21

22

23

Ms. Hutchman, Chevron's Exhibit 216.

```
(By Mr. Hopson) And this you will recall,
 3
     Mr. Fredley, is a correspondence from the Department
 4
     of Agriculture Forest Service to Mr. Watson, the
 5
     Molycorp attorney, correct?
 6
         Α.
               Yes.
 7
               And this document, if you recall, contains
         Q.
 8
     the drawings of the fan-shaped claims?
 9
               Yes.
         Α.
10
         Q.
               I want to call out something else in here.
11
               MR. HOPSON: Could we go to the second
12
     page, Page 2 of 8 and call out the final, second to
13
     the final paragraph.
14
               (By Mr. Hopson) Let's just take a second
         Q.
15
     to look at that, Mr. Fredley.
16
               The first sentence says, "We recognize
17
     that sufficient land adjacent to the mine for waste
     dumps must be made available to Molycorp by some
18
19
     means."
20
               Based on your entire review of the record
     is that the Forest Service position that they must
21
22
     make land available for waste?
23
         Α.
               Yes.
24
               Prior to the time of the valley fill
25
     proposal did the U.S. Forest Service ever object to
0351
     placing rock or waste on unpatented claims?
 1
 2
         Α.
               No.
 3
         Q.
               Let me ask you, do you recall that there
     is a regulation governing mill sites?
 4
 5
        Α.
               Yes.
 6
         Q.
               And it requires the mill sites to be
 7
     5 acres, right?
 8
              That is correct.
         Α.
9
         Q.
               But it doesn't say anything about the
     shape?
10
11
               That is right.
                               I think that is Department
         Α.
12
     of Interior regulations.
13
               MR. HOPSON: Let's call out 281,
14
     Chevron 281.
15
               (By Mr. Hopson) Mr. Fredley, you see here
16
     that this is the environmental analysis done by the
17
     Government in connection with the land exchange,
18
     correct?
19
         Α.
               Yes.
20
               I just want to call out one thing the
21
     Government says in this document, and it is at
     Page 6 of the original document, which is at Page 7
22
23
     of the PDF.
24
               MR. HOPSON: One page prior, sorry,
25
     Ms. Hutchman. If you could call out the
```

alternatives to the proposed action.

```
(By Mr. Hopson) Just take a quick look at
     that, Mr. Fredley, so we know what you are talking
 3
 4
     about here.
 5
               Have you had a chance to skim that?
 6
         Α.
 7
         Q.
               I want to ask you about one sentence in
 8
     the middle paragraph that begins, the second
 9
     alternative this sentence begins, "Under the mining
10
     laws."
               "Under the mining laws," the Government
11
12
     says, "the mining company has every right to use
13
     mill sites for waste disposal areas."
14
               Is that statement that I just read
15
     consistent with your understanding of the constant
16
     Forest Service policy other than with respect to the
17
     valley fill plan?
18
         Α.
               Absolutely.
19
               MR. HOPSON: Let's look at Chevron
20
     Exhibit 282.
21
               (By Mr. Hopson) This, Mr. Fredley, is the
22
     interim report of feasibility for the Questa site,
23
     correct?
24
        Α.
25
         Q.
               Are you familiar with this document?
0353
 1
         Α.
               Yes.
 2
               MR. HOPSON: Let's turn to Page 33 of 60.
 3
               (By Mr. Hopson) You know that this is a
         Q.
     report, Mr. Fredley, that is made in February of
 4
 5
     1972, right?
 6
         A.
               Yes.
 7
               I want to call out what the language at
         Q.
     the top of the page that says, "Present disposal
 8
9
     areas."
10
               And I want to ask you about the first
11
     sentence, Mr. Fredley. It says, "Most of the
12
     present waste is disposed on land that is the
13
     property of the Federal Government. This is done
     with the cognizance and approval of the
14
15
     administrating agency, the U.S. Forest Service."
16
               If you will look back at your study of the
17
     record for many years, is that single statement
     consistent with your opinions and conclusions?
18
19
               Absolutely.
         Α.
20
               You were shown Chevron 186, which is an
21
     article written by Robert Carpenter later in time,
22
     1968.
23
               Do you recall that?
24
         Α.
               Yes.
25
               We don't need to call that up, but
         Q.
0354
     Mr. Harrison read a paragraph in which Mr. Carpenter
```

```
talked about exploration for low grade ore occurring
 3
     as early as 1953.
               Do you recall him reading you that?
 4
 5
         Α.
               I do.
 6
               Do you also recall that Dr. Rigby
         Ο.
 7
     testified and others confirmed that there was no
     drilling at Questa prior to the DMEA contract.
 8
 9
               Do you recall hearing that testimony?
10
               I do.
               What does the historical record show?
11
         Q.
12
         Α.
               The historical record shows without a
13
     doubt that there was no diamond drilling done at the
14
     Questa Mine prior to the DMEA.
15
               The article is in 1968, he is referring
16
     back to 1953. Did something important happen at the
17
     Questa Mine site between 1953 and 1968?
18
               Well, development of a large low grade ore
19
     deposit.
20
         Ο.
               Do you think that might have influenced
21
     Mr. Carpenter's recollection of his own advice or
22
     perhaps his recounting of his own advice?
23
         Α.
               It very well could have.
24
               Mr. Carpenter never recommended looking
         Q.
     for a low grade ore.
25
0355
               He did not.
 1
         Α.
 2
               MR. HOPSON: Ms. Hutchman, let's call up
     Chevron Exhibit 218, please.
               (By Mr. Hopson)
 4
                                Take a look at that and
 5
     just make sure you recall what this is about. It is
 6
     a letter from Mr. Jack Watson to the United States
 7
     Department of Agriculture Forest Service, and it is
 8
     dated April 30, 1969.
 9
               Do you recall being asked about this?
10
         Α.
11
               Let me show you what you were asked about
12
     on Page 2 of 3. Mr. Harrison called out language in
13
     the first full paragraph asking if the Forest
14
     Service would contest certain claims.
15
               Do you see that language?
16
               Yes, I do.
         Α.
17
               And he said, in essence, hey, this is,
         Q.
18
     Molycorp's asking for validity contest, right?
19
               Yes.
         Α.
20
         Q.
               What land, what challenge to the title is
21
     at issue here?
22
               Two unpatented mining claims not owned by
         Α.
```

with Molycorp over the patenting, correct?

23

24

25

0356

Molycorp.

Ο.

named Emma Lou Reach and David Williams are fighting

These are two claims on which individuals

```
Correct.
         Α.
 3
               MR. HOPSON: If you will flip the page to
 4
     Page 3, could you call out the paragraph that
 5
     begins, "To avoid this situation."
               (By Mr. Hopson) What is Mr. Watson asking
 6
 7
     the Forest Service to do, as you understand it?
 8
               To bring some action to quiet the title so
 9
     that the exchange would move forward.
10
               He is asking the Forest Service to do his
11
     work as an attorney because he is a good lawyer?
12
               That is right.
         Α.
13
               Is this in any way related to the Forest
         Q.
14
     Service threatening a validity contest to shut down
15
     the valley fill plan?
16
               No.
         Α.
17
               Okay. Did the Forest Service threaten a
     validity contest for the purpose of shutting down
18
19
     the valley fill plan?
20
         Α.
               Yes.
21
               Did the Forest Service force the land
         Q.
22
     exchange?
23
               Absolutely, and the record is clear on
         Α.
24
     that.
25
         Q.
               And that resolved in a long angle of
0357
     repose waste piles above the Red River and the
 1
 2
     highway?
 3
               Absolutely. There is no question that the
         Α.
     Forest Service made that the only option for
 4
 5
     Molycorp.
 6
               All right.
         Q.
 7
               MR. HOPSON: Thank you. Mr. Fredley.
     Your Honor, I have nothing else.
 8
 9
               THE COURT: Thank you. This witness may
10
     step down.
11
               (Whereupon, the witness was excused.)
12
               THE COURT: And you may call your next
13
     witness.
14
               MR. HOPSON: I shouldn't have walked away.
15
               Your Honor, Chevron calls Dr. Tim
16
     Considine.
17
               (Whereupon, the witness was sworn.)
               THE DEPUTY CLERK: Please have a seat.
18
19
     State and definitely spell your last name, please.
20
               THE WITNESS: My name is Timothy
     Considine, C-O-N-S-I-D-I-N-E.
21
22
               MR. HOPSON: Mr. Considine, did you
23
     prepare written direct testimony in this case?
24
               THE WITNESS: I did.
               MR. HOPSON: Is that written direct
25
0358
     testimony accurate to the best of your knowledge?
```

```
THE WITNESS: Yes, sir, it is.
 3
               MR. HOPSON: Do you wish to make any
     changes, amendments or modifications to it?
 4
 5
               THE WITNESS: No, I do not.
 6
               MR. HOPSON:
                            Thank you. Your Honor, we
 7
     tender Dr. Considine.
               THE COURT: Very good, you may
 8
 9
     cross-examine.
10
               (Dr. Timothy Considine's direct testimony
11
     was prefiled and admitted.)
12
               THE COURT: You may proceed.
13
                       CROSS-EXAMINATION
14
         BY MR. HOSHIJIMA:
15
               Dr. Considine, was Molycorp a for-profit
         Q.
16
     company?
17
         Α.
18
               Was Molycorp engaged in commercial
         Q.
19
     activity under the direction of its executives and
20
     Board of Directors?
21
               I would presume so.
         Α.
22
               Was all of that commercial activity
23
     conducted for the purpose of making a profit for its
24
     stockholders?
              Yes, I believe so.
25
         Α.
0359
               If the Questa Mine were not profitable,
 1
 2
     Molycorp could have stopped mining it at any time,
 3
     correct?
 4
        Α.
               That is an option they could exercise,
 5
    yes.
 6
               The Government never forced Molycorp to
         Q.
 7
     stay in business if it was unprofitable, did it?
 8
               Not to my knowledge.
 9
               Let's turn to your direct testimony. You
10
     began your testimony by describing the Government's
11
     approach to molybdenum during World War II, correct?
12
               Yes, sir.
13
               Was World War II during Molycorp's first
14
     underground mining phase?
15
         Α.
               Yes.
16
               That was the first of three phases of
17
     mining at the Questa site?
18
         Α.
               Yes.
19
               Was that the old underground mine that
         Ο.
20
     Molycorp operated until about 1956?
21
               Yes, it was.
22
               During World War II were there a number of
         Q.
23
     Government programs to simulate the production of
     various resources, including molybdenum?
24
25
         Α.
               Yes.
0360
 1
         Q.
               Did Molycorp participate in any of those
```

programs?

3

4

5

6

7

8

9

10

11 12

13

14

15

16

17

18

19

20

21

22

23

1

4 5

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9

10

11

12

13

14

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16

17

18

19

20

21

22

23

24

25

- Α. As I described in my report, no.
- Q. Did Molycorp receive Government aide through the defense planned corporation program?
 - No, they did not.
- Q. Did Molycorp receive Government aide through the emergency planned facilities program?
- No, they did not. And in my report I described the reasons why they did not. They were a fairly small operation and they were well on in their production period. They had been producing more than 20 years, at that point, and I judged that there were little incentives for them to adopt those offers.
- Did Molycorp receive Government aide Q. through the necessity certificates program?
 - Α. No.
- Do you agree, then, with Dr. Brigham's expert opinion that Molycorp received no Federal assistance through any World War II programs that were potentially available at that time?
 - Yes. Α.
- 24 Let's pull up your direct testimony and 25 turn your attention to the testimony at the bottom 0361
 - of Page 6 to the top of Page 7.

Did you testify that the postwar decline in molybdenum production contributed to the United States passage of the Defense Production Act of 1950?

- I think that was one factor in it. There Α. were many considerations in the passage of that legislation. There was an expectation that world economic growth would accelerate into the future and there was overarching concern that resource availability could be an issue that would constrain the potential of the economy to grow.
- The Defense Production Act of 1950 was not Q. specifically about molybdenum, was it?
- As far as I understand it, it covered many nonfuel and nonfuel minerals, including molybdenum.
- The Defense Production Act, then, was a wide-ranging statute that had to be with expanding the supply of various materials not just molybdenum, right?
 - Yeah, I would agree with that, yes. Α.
- So when you say that the decline in molybdenum production contributed to the passage of the Defense Production Act, you are not making that statement as an expert in mid-20th Century American 0362
- 1 history, are you?

Well, can you refer, give me a moment

```
3
     just --
 4
               MR. HOPSON: Your Honor, could I remind
     the witness that he has a binder with all of his
 5
 6
     testimony sitting right there if he is looking for
 7
     something else.
 8
               THE WITNESS: Thank you.
 9
               Yeah, I did mention, "The post-war decline
         Α.
10
     in molybdenum production contributed to the
     United States Government's passage of the Defense
11
12
     Production Act of 1950."
13
               (By Mr. Hoshijima) Did you review the
14
     legislative history of the Defense Production Act in
15
     making that statement?
16
               Not in great detail.
         Α.
17
               So are you opining that molybdenum
18
     specifically was the reason that Congress decided to
19
     pass the Defense Production Act?
20
               That was not my intent in that statement.
21
     I think it was a contributing factor.
22
               You don't have an opinion on the degree of
23
     contribution, though?
24
        Α.
               No.
25
         Q.
               Let's keep moving forward in time.
0363
               Did molybdenum participate in any
 1
 2
     Government incentive programs during the Korean War?
 3
               Not that I am aware of.
               The Korean War was also during the first
 4
         Q.
 5
     underground mining phase, correct?
 6
               May I make a correction on that?
         Α.
 7
               Please.
         Q.
 8
               When you asked did molybdenum contribute
        Α.
9
     or participate in any Government programs during the
10
     Korean War, I answered with respect to Molycorp.
11
               I am not -- I believe other producers in
12
     the -- other molybdenum producers may have
13
     participated in those programs.
14
               My question was specifically about
         Q.
15
    Molycorp.
16
         Α.
17
         Q.
               To clarify the record, Molycorp did not
18
     participate in any Government incentive programs
19
     during the Korean War, correct?
20
         Α.
               Yes, that is correct.
21
         Q.
               And, again, that was during the first
22
     underground phase?
23
         Α.
               Yes.
24
               Even without Government aide from these
         Q.
25
     World War II or Korean War programs, Molycorp
0364
    profited from the first underground mine, correct?
```

```
Α.
               Yes.
 3
         Q.
               By the mid-1950s the first underground
 4
    mine was beginning to run out of ore, correct?
 5
               Yes, that is correct.
         Α.
               You offer an opinion that Molycorp would
 6
 7
    not have undertaken any more exploration at the
 8
     Questa site after that time without assistance from
 9
     the DMEA, correct?
10
               Yes. The way I viewed it was from a
     project finance standpoint where if Molycorp wished
11
12
     to find new reserves, they would have to explain
13
     their current production trajectory, which was
14
     approaching depletion, and it would be really
15
     difficult for them to make the case that what they
16
     were doing could be extended.
               It was a small operation and as the
17
18
    previous witnesses have described, they were
19
    primarily focused on one form of mining that did not
20
     include open pit mining but instead focused on
21
     underground mining following fairly high
22
     concentrated or veins.
23
               MR. HOSHIJIMA: Let's pull up that
24
     testimony on Page 11 of your direct exam.
25
               (By Mr. Hoshijima) We are looking at a
0365
     couple of questions and answers in the middle of
 1
 2
     that page.
 3
               This is a similar opinion to what
     Dr. Rigby and Mr. Fredley testified about earlier,
 4
 5
     right?
 6
               Yes, it is similar.
        Α.
 7
               Are you relying on their opinions or are
     you putting forth this opinion independently?
 8
 9
               I am putting it forth independently based
10
     on my experience teaching mineral economics for more
11
     than 20 years at Penn State and working with mining
12
     engineers where I learned that the expenditures for
13
     the discovery of ore bodies is very high risk.
14
               And then once that is established there is
15
    success, there are very significant capital
16
     expenditures that follow to identify, delineate and
17
     define the ore body and demonstrate to banks, in
18
     particular, that the development risk is lower and
19
    production could be at some point contemplated.
20
               Dr. Considine, my question was just
21
     whether you had an independent opinion. That is a
22
     yes or no?
23
               That is a yes.
         Α.
24
               THE COURT: He answered the question.
25
               MR. HOSHIJIMA: He answered a lot more
0366
     than the question, Your Honor.
```

```
(By Mr. Hoshijima) Were you in the
 3
     courtroom yesterday listening to Dr. Rigby's
 4
     testimony on this issue?
 5
               Yes.
         Α.
 6
               Were you listening to Mr. Fredley's
         Q.
 7
     testimony on this issue?
 8
         Α.
               Yes, yes.
9
               In that case we will try to move through
         Q.
10
     this fairly quickly.
11
               Do you believe that Molycorp started a
12
     private exploration program in 1954, which was
13
     three years before the DMEA contract?
14
               When you use the term private, what was a
         Α.
15
     private?
16
               A private exploration program?
         Q.
17
         Α.
               Private exploration program. That seems a
18
     bit new to me. I know there was exploration --
19
     mining companies do exploration all the time.
               What I did in my research behind the
20
21
     expert report was I looked at the annual reports and
22
     one of the difficulties with looking at the annual
23
     reports and making inferences is that they cover the
24
     entire company, not just molybdenum production, but
25
     the other minerals that Molycorp produced.
0367
 1
               Let me make sure I understand the answer.
         Ο.
 2
     Are you saying that Molycorp did start a private
     exploration program at the Questa site in 1954?
               When you say private exploration effort,
 4
 5
     it sounds like some sort of company, and I just -- I
 6
     am unaware of that.
 7
               MR. HOSHIJIMA: Can we pull up USX003,
     please, and turn to page -- well, let me show the
 8
9
     cover first.
10
         Q.
               (By Mr. Hoshijima) Do you recognize this
11
     as Molycorp's statement to the SEC?
12
               Right, from 1964.
13
         Q.
               And you see that at the very top of that
14
     document?
15
         Α.
               Yes, thank you.
16
               MR. HOSHIJIMA: Let's turn to Page 17.
17
     Can we magnify the second to the last paragraph
     starting with, "In 1954."
18
19
               (By Mr. Hoshijima) Dr. Considine, can you
20
     review this paragraph?
21
               Yes, I remember reading this, awhile ago.
22
         Q.
               Do you agree, then, that in 1954, which
23
     was three years before the DMEA contract, Molycorp
24
     started a privately-funded exploration program at
```

A. That is what the words say, yes.

25

0368

the Questa site?

- MR. HOSHIJIMA: We can take that down.
 - (By Mr. Hoshijima) Do you agree with the Q. prior testimony that Molycorp obtained millions of dollars in financing through bank loans and stock offerings in 1954 and '55?
 - I heard that in the previous testimony, and I believe it to be true.
 - Any reason to believe that is not true? Q.
 - No. I would add, though, that I believe those statements are based on the overall capital raising by the entire company. So it is not clear, and that is one of the difficulties I had in my research. In using the annual reports, they report consolidated income assets and activity. They have records broken down by commodity, but oftentimes the numbers are not as aggregated.
 - Molycorp during this time period had operations outside of Questa, New Mexico, correct?
 - Α. That is correct.

4

5 6

7

8

9

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18 19

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21

22

23

- What are some of those other operations? Q.
- As I recall, in the late '50s there was a mine, rare earths mine, a Columbian mine, and there were other properties that were in various stages of development, such as the Québec property previously 0369
 - discussed in prior testimony.
 - Q. Is it fair to say, then, that in this time period, and that is the 1950s, Molycorp is a company of international scope?
 - Yeah, yes. Α.
 - We talked about the bank loans and the Q. stock offerings in the mid-1950s. Did that give Molycorp millions of dollars of cash in hand as of 1955?
 - Α. You know, I really can't say what their capital needs and there -- you know, when companies deal with capital, it is quite complicated and I didn't really have any insights into their sources and uses of capital other than just reading the annual reports.
 - MR. HOSHIJIMA: Can we pull up USX519, which has been previously admitted.
 - (By Mr. Hoshijima) Do you recognize this to be Molycorp's report to stockholders for the year ending 1955?
 - Α.
 - MR. HOSHIJIMA: Let's go to Page 6, If we can expand the top half of the page under Current Assets.
- (By Mr. Hoshijima) This is for the year 25 Q. 0370
- 1 1955. Molycorp has \$3.15 million in cash on hand,

correct?

```
3
        Α.
               Yeah, yes.
               In your direct testimony you discuss 2019
 4
         Q.
     dollars versus dollars of the day, let's say dollars
 5
 6
     in 1956.
 7
               Do you recall that?
 8
         Α.
               Yes.
 9
               This $3.15 million that Molycorp had on
         Q.
10
     hand in 1955, that is worth a lot more than
     $3 million is worth today, correct?
11
12
               In today's dollars it would be larger than
13
     the numbers reported on the page here, yes.
14
               Many times larger?
15
               Yes. But may I add a clarification here,
16
     firms use cash for a variety of uses. They have
17
     cash needs other than exploration, operations, and
18
     so on, payroll, benefits. There are many uses of
19
     cash.
20
         Q.
               It would have been Molycorp's choice how
21
     to spend that cash?
22
         Α.
               Of course.
23
         Q.
               It had a variety of options, including
24
     exploration, right?
25
               Yes, yes.
         Α.
0371
               The Government had no say in how Molycorp
 1
 2
     spent this cash, right?
 3
               Not that I am aware of.
         Α.
 4
               MR. HOSHIJIMA: We can take down this
 5
    document.
 6
               (By Mr. Hoshijima) Dr. Considine, do you
         Q.
 7
     agree with Mr. Fredley's testimony that to obtain
     DMEA funding an applicant had to show the geologic
 8
9
     probability of making a significant discovery?
10
               Well, I am not really qualified as an
11
     economist to opine on that. What I can tell you is
12
     that I read the supporting documentation and I
13
     notice that is the description of the DMEA program.
14
               And what struck me was they had a table at
15
    the end of loans that -- the number of loans
16
     approved and denied. And they mention in the
17
    narrative that one of the criteria was the presence
    or the possibility of reserves being at the
18
19
     location.
20
               And that reminded me of an old adage in
21
     the oil industry that the best place to drill for
     oil is in an oilfield. In other words, and this, I
23
     think this applies to minerals as well. So if you
24
     already have a site that is in production, it is
25
     likely that there could be additional reserves
0372
 1
    nearby. So, yes, I agree with Mr. Fredley's
```

```
assessment.
 3
        Q.
               To follow-up on that statement about the
 4
    oilfields.
 5
         Α.
              Yes.
 6
               At the Questa site Molycorp had been
         Q.
 7
    mining molybdenum for decades, right?
 8
               Yes. When we are talking 1955, it would
    have been about 35 years, yeah.
 9
10
              Given that, to obtain the DMEA funding
11
    Molycorp, had to demonstrate a significant
12
     probability of finding a discovery. Couldn't
13
    Molycorp have gone to a private lender with that
14
     same geological information and requested a loan?
15
               Well, it is possible, but as I mentioned
16
     in my report that this mine, this particular mine, a
17
     fairly small mine by world standards, was nearing
     the end of its useful life. It was depleting.
18
19
     it probably would have been a tough sell, if you
20
     will, on that basis.
21
               You can't rule out the possibility that if
         Q.
22
    the DMEA contract had not been awarded Molycorp
23
     could have gotten a private lender to give it a loan
24
    based on that same geological information?
25
               Well, anything is possible, but the fact
         Α.
0373
    of the matter is DMEA loaned Molycorp money and they
 1
    both entered an exploration effort. That is a fact.
               Do you recall how much money Molycorp was
 4
     able to obtain from the DMEA in a loan?
 5
               It was about half a million dollars in
 6
     dollars of the day --
 7
               Was --
         Q.
 8
               -- total, and then they shared their cost,
         Α.
9
    50/50.
10
         Q.
               The amount Molycorp got from the
11
    Government was no more than $250,000, correct?
12
              Yeah, it could have been slightly over
13
    that.
14
               $255,000?
         Q.
15
               Yeah, that's correct.
         Α.
16
             Do you recall the testimony from, I
17
    believe yesterday, that Molycorp did not actually
     even use that whole amount, it only used about
18
19
     $200,000?
20
         Α.
               Yes, I recall that.
21
               Do you agree with the prior testimony that
     during the period of DMEA funding, which was about
22
     1957 to 1960, Molycorp spent over 1 million of its
23
     own money for exploration efforts?
25
               That sounds about right, yes, I agree with
         Α.
0374
1
    that.
```

```
Do you agree with the prior testimony that
 3
     during the 1957 to 1960 time period Molycorp
 4
     conducted thousands of feet of drifting and
 5
     crosscutting on its own without the DMEA funding?
 6
               I heard that and I can't dispute that.
 7
    Again, I am an economist, not a mining engineer.
 8
     was struck by Dr. Rigby's testimony that it was the
 9
     geologic knowledge and expertise that the USGS
10
     shared with Molycorp that was quite valuable.
     Sometimes there are things that people do that
11
12
     aren't monetized, and this may be one example.
13
               Let's go up to Page 12 of your testimony.
14
               In the second to the last answer on that
15
    page you say, and I am referring to the second half
16
    of that answer. "Molycorp would not have been able
17
    to borrow the money needed for this exploration
18
    before the Federal Government's DMEA loan."
19
               Yes, that is clear.
20
               MR. HOSHIJIMA: And let's get rid of that
21
    magnification. And go to the next page.
22
               (By Mr. Hoshijima) In the second to the
23
    last answer on that page you say, "Molycorp could
24
    have never secured the necessary financing to
25
     delineate and develop the low grade ore body without
0375
 1
    the Government's certification."
 2
               Is that your testimony?
 3
         Α.
 4
         Q.
               The word "never" in there is very
 5
    definitive, right?
 6
         Α.
               Yes.
 7
               You didn't qualify that statement in your
 8
    direct testimony, did you?
9
         Α.
               Apparently not.
               But you didn't site any historical
10
         Q.
11
     document in which a bank or lender says that it
12
     would not have provided a loan but for the DMEA
13
     certification, correct?
14
               It is hard to find a counterfactual, I
15
    didn't look for it. I was just, again to reiterate,
16
     I was -- I viewed Molycorp at that point in time
17
    when the DMEA contract was struck in 1957 as a small
     company or a small operation that was sort of on its
18
19
    last legs and they needed outside help, primarily in
```

extending their reserve base. At the beginning of that answer you said finding a counterfactual is difficult and you didn't look for one, right?

terms of a paradigm shift on how they would look for

That is correct. Α.

20

21

22

23

24

- 0376 1
 - Q. And yet without having looked for a

```
counterfactual and recognizing that is not possible, you said that Molycorp could have never secured the necessary financing without the certification?
```

- A. That is clear as a bell, right here on the screen. Again, I would like to remind you, the focus of my report was on quantifying the benefits from the Questa site.
- Q. The focus of your opinion in this case was not about the DMEA?
- A. Oh, I did mention DMEA but, you know, the core effort in the report was to determine the profitability of the mine, the state and local economic impacts, and the impacts on the overall molybdenum market.
- Q. So it is not a core opinion that Molycorp could have never secured the necessary financing without the certification?
- A. I would look upon it as my opinion as an economist based on the data and information I reviewed.
- Q. Turning to Page 13 of your testimony at the top of that page you say that, "Molycorp borrowed and spent about \$50 million after the certification to prepare the open pit mine for

1 operation."

Do you see that?

- A. Yes, I do. At the very top of the page?
- Q. Yes.
- A. Yes.
 - Q. That is part of your answer?
- A. Yes.
- 8 Q. None of that money came from the 9 United States, right?
 - A. As far as I know, that's correct, none of it did come from the United States.
 - Q. Now the figure in your report is 50 million, but wasn't it more like \$110 million that Molycorp spent to develop the open pit mine?
 - A. Oh, the data that I used for cap X for the mine was based on a ten-year summary of mine performance dated 1975.

And in the very first column where cap X prior to 1960, prior to the mine startup. And it was actually 43.06 million, so I don't know where the 110 million is coming from.

- Q. I think you used the term cap X, which I am not familiar with. Can you explain that?
- A. Capital expenditures. Upfront capital expenditures for the construction of the mine and 0378
 - supporting facilities.

```
MR. HOSHIJIMA: Let's pull up USX481, please. This is a document that has been previously admitted.
```

- Q. (By Mr. Hoshijima) Do you recognize this as a 1957 Molycorp document entitled Questa Mine and Mill Fact Sheet?
- A. Correct. It is November 1975. I see to date a total of 110 million has been invested.
- Q. And you are referring to the top paragraph of this fact sheet?
 - A. Yes.
- Q. The 110 million that has been invested, this is talking about the open pit mine at Questa, right?
- A. Wait a minute. You know, actually when I read that paragraph it is kind of ambiguous whether, you know, they are including, you know, capital expenditures prior to the construction of the open pit mine.

So, and the other caveat with this number is when I did my profit evaluation and investment evaluation, the 43.06 that I just quoted you a few moments ago, that was for the open pit prior to '66.

25 Subsequent to that the -- there were

numbers or expenditures for capital in subsequent years and that is not included in the 43.06 that I quoted you as the upfront expenditures.

So, you know, you have to be careful on the numbers and what they include and it is not clear to me, you know, they mention in the first sentence high-grade underground mining operation. Are they including, you know, to date, well, what does that mean, going back to 1920 or 1966? It is not clear to me.

And that is sort of the test I used when I did my analysis. I was looking for numbers that were historically accurate and represented actual expenditures over a certain period of time.

- Q. Assuming that this 110 million-dollar figure includes investments dating back to the beginning of the first underground mine operation, would all of that money have been Molycorp's private finance?
- A. Well, that is a big assumption, one, but I will grant you if you assume that, what do you mean by private? I mean, it would be included in their assets and, you know, depreciated over time, and so on. I have no idea if this is a, you know, pre or post-depreciated capital, I don't know what it is.

1 These are the type of numbers I shied away

```
from in my analysis. Usually I focused my analysis
 3
     based on accounting and financial records from the
 4
     mine operation.
 5
               None of this $110 million invested in this
 6
     site would have come from the U.S. Government,
 7
    right?
               Oh, well, there was the DMEA, well that
 8
 9
     was repaid and that was it, yeah, it was likely.
10
               For $200,000?
         Q.
11
        Α.
               Yeah, to the $250,000.
12
               Other than the DMEA, none of this $110
         Ο.
13
     million in investment at the Questa site comes from
14
     the U.S. Government, right?
15
               Right. But I, you know, I really would
16
     like to impress upon the Court here that, you know,
17
     it is the -- there are a lot of good ideas that
18
     aren't monetized, you know, and this idea of
19
     searching for a low-grade ore body, convincing a
20
    mine that was in operation for more than three
21
    decades that they should have a paradigm shift and
22
     look elsewhere, have a different view of the mine,
23
    was a very important contribution by the USGS and
24
    the Bureau of Mines. And that is what those
25
     agencies do, they help industry.
0381
 1
               $200,000 that the DMEA contributed, that
 2
    number is less than a quarter of 1 percent of 110
 3
     million, right?
               Yeah, it is a small number, you know, if
 4
 5
     you are comparing it to a large number, but, again,
 6
     I have to reiterate not all great ideas are
 7
     monetized. In fact, many of the best ideas of all
     time are not monetized.
 8
 9
               MR. HOSHIJIMA: I move to strike that
     answer as nonresponsive.
10
11
               THE COURT: Overruled. You give it to the
12
     witness to answer, and he answered.
13
               MR. HOSHIJIMA: You can take this down.
14
               (By Mr. Hoshijima) Would Molycorp have
15
     developed the open pit mine if it did not think it
16
     would be profitable?
17
               No.
         Α.
18
               MR. HOPSON: Objection, calls for
19
     speculation.
20
               THE COURT:
                          Sustained.
               (By Mr. Hoshijima) Did Molycorp know that
21
     there was a risk that the open pit mine would not be
22
```

A. Please repeat the question.

THE COURT: Overruled.

MR. HOPSON:

23

24

25

0382

profitable?

The same objection.

- Q. (By Mr. Hoshijima) Did Molycorp know there was a risk that the open pit mine would not be profitable?
- A. Oh, I have no factual basis to answer that question, I really don't know.
- Q. You have no idea if Molycorp knew about the risk of a lack of profit at the open pit mine?
- A. Well, let me say this: I took a look at the mine feasibility analysis that was discussed and brought up in previous presentations and it is a very long document, lots of numbers. And one thing that was not done, as far as I can tell from a quick scan of the documents, is a risk analysis.

And a risk analysis is a fairly complicated mathematical technique where you recognize the uncertainties of certain parameters that guide your investment valuation such as price or cost or strippage, for instance, that was not done. But I am sure that the people who prepare those numbers, especially the people who did the computations had a feel for the sensitivity of the bottom line estimate to certain key consumptions.

MR. HOSHIJIMA: Let's pull up USX003. Let's turn to Page 5, please.

- Q. (By Mr. Hoshijima) Did Molycorp estimate in this SEC filing that the cost of preparing the open pit mine and preparing it for production is approximately 27 and a half million?
- A. Yes, that is stated in the paragraph, and I recall reading about this and noted that this document was prepared, I believe, in 1964 several years prior to the actual opening of the mine, the open pit mine.
- Q. To come up with 27 and a half million to develop the open pit mine, Molycorp borrowed a lot of money, right?
- A. I presume so, but I didn't really look at the debt equity sources of financing. But previous testimony indicated, identified a couple of banks and I would imagine most of this capital was obtained from bank loans.

 $$\operatorname{MR}.$$ HOSHIJIMA: Let's magnify the last paragraph on this page, please.

- Q. (By Mr. Hoshijima) Do you see where it says, "As a result of the bank loans and the sale of the debentures offered hereby, the company will incur an aggregate indebtedness of nearly 32 and a half million dollars."
- A. Yes, I see that.

Q. That was considerably in excess of the

```
company's total assets and net worth, correct?
 3
               That is what the words read, yes.
         Α.
 4
               Is incurring that amount of debt a risky
 5
     thing for a company to do?
 6
               Well, I am an economist, not a financier,
 7
    but companies incur debt all the time. Some have
 8
     very high levels of debt relative to their assets.
 9
     It varies by the industry.
10
               MR. HOSHIJIMA: Turning to the next page
11
     of this document. Let's magnify the last paragraph
12
    before the heading, Subscription Offer.
13
               (By Mr. Hoshijima) Did Molycorp
14
    recognize, "The risks inherent in all mining
15
    venture, many of which risks arise by reason of
16
    conditions which may be beyond the control of the
17
    company"?
18
               THE COURT:
                          What is your question?
19
              (By Mr. Hoshijima) I am asking if Molycorp
20
    recognized the risk in 1964 of open pit mining?
21
               There is really no basis in my analysis.
22
    It really wasn't a focus of my analysis, and it
23
    would only be speculative on my part to say whether
24
    Molycorp can, as you asked, considered the risks.
25
     am sure they were aware of them but, you know, I
0385
 1
    can't get inside the heads of the people who were
 2
    making these decisions back then.
               In this Molycorp document, Molycorp tells
 4
     investors to consider these risks, right?
 5
               Yeah, that is what this paragraph is
 6
     intending to communicate, the inherent risks and
 7
     these are all accurate that are associated with any
 8
     mineral investment property.
 9
              One of the risks listed in this paragraph
10
     is a change in economic and general conditions?
11
        Α.
               Where are you, on the third line? Yes,
12
     okay. Yes.
13
               Another risk to Molycorp was, "the
14
     development of additional sources of molybdenum and
     competing metals and products"?
15
16
               That's correct.
         Α.
17
               Another risk that Molycorp was aware of
         Q.
    was that, "there may be changes in the price and
18
19
    market conditions for molybdenum products"?
20
         Α.
               That is what the paragraph reads, yes.
21
               And another risk that Molycorp was aware
    of was that, "construction delays and other factors
     might affect the capital cost of the project and the
23
24
     cost of mining and production"?
```

Q. Despite knowing those risks, Molycorp

That is correct.

25

0386

Α.

- decided to go forward with the open pit mine, right?
 - A. They made that decision, yes.
 - Q. They made that decision voluntarily?
- A. Yes.

- Q. Did that risk pay off?
- A. Well, according to my analysis, both the open pit mine and the underground mine lost money.
- Q. Did the fact that the business risk did not pay off mean that Molycorp should not be responsible for environmental consequences?
- A. No, I believe Molycorp and Chevron are agreeing to shoulder their share of the cost, whatever is decided.
- Q. You opine that Molycorp's open pit mine and second underground mine were unprofitable, correct?
 - A. Yeah, that is what my analysis shows.
- Q. To reach that conclusion you used a before tax cash analysis, correct?
- A. Yes. Well, I actually compared that to a GAAP analysis, Generally Approved Account Procedure Analysis, and both methods show that the mine lost money for the open pit.
- I just did it before tax cash analysis for 0387
- 1 the second underground mine.
 - Q. The approach you discuss in your direct testimony is just the before-tax approach, correct?
 - A. Well, I recommend that approach but I do present by way of comparison the conventional approach where you capitalize stripping costs, and other costs.
 - Q. Does that analysis take into account any impacts of taxes on the economics of the open pit mine?
 - A. No. I used the convention in mineral economics that projects are evaluated on a before-tax basis.
 - Q. A company can sometimes use losses to offset tax liabilities, correct?
 - A. That is correct, however, like I said, the convention in mineral economics is to look at, essentially, the cash flow. How much money is coming in the door to support the operation and how much money is going out the door to run the operation. And that is kind of the gold standard in financial analysis.
- In fact, a lot financial analysts today look at tech companies the same way. Tech company may look good on an after-tax basis, but when you may look good on an after-tax basis, but when you
- 1 look at it on a tax -- on a before-tax cash flow

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basis, it may not look so good. So really kind of gives you a true picture of the cash generating capability of the enterprise.
```

- Q. Let me be clear. The approach you used did not take into account the tax effects?
 - A. That is correct.
 - Q. Did Molycorp have other --
- A. I have a caveat on that, only to the extent my subsequent analysis, I did in the economic impacts track the taxes that Molycorp paid for concentrate Social Security taxes, and state and local taxes.
- Q. Did Molycorp, and we are talking about the open pit mine period, have other assets other than at Questa that might have resulted in taxable income even when it was taking a loss at Questa?
- A. Yeah, that is possible, but, again, the question that I focused on in my study was what was the financial viability of the Questa Mine because the focus here is who is going to pay for the cost of environmental remediation.

So Questa, the operators of Questa and its financial viability at the mine was the core issue.

MR. HOSHIJIMA: Let's turn to CX123,

please. Let's turn to the next page after this.

- Q. (By Mr. Hoshijima) Do you see this is Molycorp's 1963 annual report?
- A. That is indicated on the top left, yes.
 MR. HOSHIJIMA: I move to admit CX123.
 MR. HOPSON: No objection, Your Honor.
 THE COURT: With that objection, 123 is admitted.

(Exhibit admitted, CX123.)

- Q. (By Mr. Hoshijima) This annual report is from 1963 which is why Molycorp is developing the open pit mine, correct?
 - A. Yes.

 $$\operatorname{MR}.$$ HOSHIJIMA: Let's magnify the third paragraph under Financial. The paragraph above that, please.

- Q (By Mr. Hoshijima) This report by Molycorp says that in 1963, which was just before it started the open pit mine, the company's financial condition was the strongest in its history, correct?
 - A. That is what it says, yeah.

MR. HOSHIJIMA: Let's take down that call out and pull up the last paragraph under Financial.

- out and pull up the last paragraph under Financia Q. (By Mr. Hoshijima) Do you see where it says that Molycorp took the exploration and
 - 1 development expenditures at the Questa site and

deducted it for income tax purposes and eliminated the entire 1963 income tax liability for the parent company?

A. Yes, that is what it says.

- Q. Well, Molycorp benefited financially as a company as a whole from this particular expense, right?
- A. That is what the passage says, yes, that's correct.
- Q. In fact, not only did Molycorp use its exploration expenditures at the open pit mine to write off its entire 1963 income tax liability, but it also got refunds for income taxes for prior years, correct?
 - A. Yeah. That is explained by our tax laws.
- Q. Your analysis, though, was that before tax analysis, which did not take into account this sort of thing, correct?
- A. That's correct because, again, I was focused on the economic viability of the Questa Mine and I did not have the detailed data that would be required to do a complete disaggregation and allocation of any sort of tax benefits recognizing that this was a multi-product operation. It was a
- very complicated accounting exercise, essentially. There was no breakouts of, you know, cash flow from rare earths and the other enterprises that Molycorp had. And, again, the convention in mineral economics is to look at projects on a before-tax basis because taxes can get very complicated, they vary by jurisdiction, you know, country by country, state by state, depletion allowances and so on. So it is hard to get an apples to apples comparison of projects.
 - Q. Taking you back to the beginning of that answer, you did not do the detailed analysis that would have been necessary to say whether the Molycorp company as a whole benefited financially monetarily from the Questa Mine, right?
 - A. Yes. And the reason I didn't is I didn't have the data.
 - Q. To clarify, when you said yes, did you not do that detailed analysis, correct?
 - A. I did not do the detailed analysis.

 THE COURT: He said that, Counsel, four or five times.
- Q. (By Mr. Hoshijima) You opined that the Questa open pit mine was not profitable for two main reasons, correct?
- 1 A. Yes.

- Q. The first of those was that it encountered higher than expected stripping costs, correct?
 - A. Correct.

- Q. Was the second that they had fluctuations in places?
- A. I believe I said in my report that when prices eventually went up in the mid-'70s production at Questa's open pit mine was declining. So they were sort of at the -- sort of an unfortunate sequence of events where their production in the open pit was declining and they weren't able to capture additional revenues. Prices soared in the late '70s to offset their prior losses.
- Q. Let's put that aside and start with your first reason, which has to do with stripping costs?
 - A. Yes.
 Q. Before developing the open pit mine,
- Molycorp estimated what it felt its costs would be, right?
- A. Yes. I did previously mention the feasibility report and in that report, estimated costs were projected.
- Q. But much more than Molycorp expected had to do with the move to open pit mine?
 - A. That is correct.
 - Q. That is because it encountered an instability in the west wall of the open pit mine?
 - A. Again, I am not a mining engineer. I was just looking at the numbers and I saw the stripping costs jump up and I was just looking at the cost numbers. I didn't look at the causation.
 - Q. You don't know what caused the increased stripping costs in the mid-1960s?
 - A. I said through the previous testimony, I think it is pretty clear that there was some sort of, you know, slide, whatever you want to call it, technical term. It just said we moved more earth which meant more diesel fuel costs and equipment time and labor to move all the material. And that showed up in my cost numbers.
 - Q. When the stripping costs increased above what was initially anticipated, Molycorp decided to continue open pit mining anyway, right?
- 20 A. The record shows that production continued 21 from 1966 through 1981.
- Q. Even though Molycorp knew that decision would result in far more waste rock having to be disposed?
- 25 A. Yeah, I just looked at the numbers. 0394
 - 1 Again, you know, I just took it as a given. I

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didn't really make any connection with their
operational decisions and whether or not they should
have pursued it.
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- The instability that Molycorp encountered Ο. that resulted in these increased stripping costs, is that the kind of risk that Molycorp knew about before it started open pit mining?
- Oh, I can't speak for the engineers and Α. the project managers. It certainly was a discontinuous event there. I can't recall the exact year, I think it was '69 or '70 where stripping costs jumped up very abruptly and that looks to me like a surprise, excuse me.
- Isn't that kind of unexpected geological finding the exact kind of risk that Molycorp described in that SEC document we saw earlier?
- Yeah, it would be consistent with that, but those, I mean, things happen.
- You testified also that operating profits started falling significantly starting 1977, correct?
- Α. Yeah, I believe that is the -- your question was operating profit or costs?
- Operating profits. 0395

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- Α. Operating profits, yeah, it looked like they really started going down in 1977, you are right.
- Q. Was that the same year that there was a massive rock slide in the open pit mine that shut off half of the pit's capacity?
- You know, I really didn't track that. I mean, I heard about the slide, but I was really kind of focused on the numbers and just took them. I didn't think it was important to pull in my analysis, I don't know.
- MR. HOSHIJIMA: Could we pull up Dewey direct exam, PDF Pages 17 to 18. The Dewey direct exam. Let's go down another page, bottom of Page 18 to 19, please. Let's expand the answer starting with, "Yes, when the company signed." I'm sorry, that's not the right one. Let's take it off. Let's take down this document.
- (By Mr. Hoshijima) You also analyzed the profitability of the second underground mine, right?
 - Yes, sir.
- 22 Is Molycorp's decision to shift the mining Q. 23 back underground?
 - Pardon? Α.
- 25 Was it Molycorp's decision to shift the 0396
 - mining back underground?

Yes.

Α.

```
3
         Q.
               Did Molycorp incur a capital cost of
 4
     developing the second underground mine of
     $250 million?
 5
 6
         Α.
 7
         Q.
               None of that came from the United States,
 8
     right?
 9
         Α.
               Correct.
10
               By then, though, the molybdenum prices had
11
     dropped, right?
               What year?
12
         Α.
13
               1983 when the second underground mine
         Q.
     started production.
14
15
               Yes, yes 1983, yeah.
16
               You opine later in your direct testimony
         Q.
17
     that the Government sales from the stockpile could
     have affected the market prices of molybdenum?
18
19
        Α.
               Yes. I did a market simulation of during
20
     the period, I think, it was 19- -- in the '60s
21
     through the mid-'70s the stockpile for molybdenum
22
     was eliminated by 1975. And, yes, I presented
23
     evidence that showed that the sales from the
24
     stockpile reduced market prices.
25
               The last sale was 1975, so that would have
0397
     nothing to do with the unprofitability of the second
 1
 2
     underground mine, right?
 3
               That's correct.
         Α.
 4
               You didn't analyze the current financial
         Q.
 5
     status of Chevron, did you?
 6
         Α.
               You mean in 2020?
 7
               MR. HOPSON: Objection, relevance of
 8
     Chevron's current financial situation.
9
               THE COURT: Sustained.
10
              (By Mr. Hoshijima) Does Molycorp now own
11
     the property at the Questa Mine?
12
               My understanding, I visited it a few years
13
     ago, Chevron owns the property and there is
14
     facilities operating there.
15
               Chevron owns the property, not Molycorp?
         Q.
16
         Α.
               Yeah.
17
               Chevron would benefit from any future
         Q.
18
     increases in the value of the property once it is
19
     cleaned up, correct?
20
         Α.
               Yeah, I presume so if they are the owner.
21
     As the previous witnesses have described, there is
     kind after complex mosaic of landownership because
23
     you are in a forest land and BLM land, so I am not
24
     sure what the footprint is.
25
               MR. HOSHIJIMA: Let's pull up CX487,
0398
1
    please.
```

```
(By Mr. Hoshijima) Is this a figure from
     your direct testimony that shows your estimate of
     labor income from the open pit mine?
 5
               Yes, yes.
         Α.
 6
               In the first column the wages and salaries
         Q.
 7
     were paid to Molycorp employees, right?
 8
         Α.
               Correct.
9
               Employees like Mr. Dewey?
         Q.
10
         Α.
               I am not sure if Mr. Dewey is still
11
     working with Molycorp.
12
               These wages and salaries weren't paid to
13
     the United States, were they?
14
               No, they are paid to individuals who paid
15
     taxes to the United States.
16
              The second column, benefits.
         Q.
17
         Α.
               Yes.
18
               Is that referring to benefits to Molycorp
         Q.
19
     employees like pensions, vacation and health
20
     insurance?
21
        Α.
               Yes.
22
         Ο.
               Those numbers in that second column, they
23
     are not paid to the United States, are they?
24
               Well, every employee that's supported by
25
     health care is one less employee that has to be
0399
 1
     supported by the Government.
 2
               Looking at the indirect column, indirect
     income in the fourth column.
 4
         Α.
               Yes.
 5
               Do those values represent Molycorp's
     purchases of goods and services from other local
 6
 7
     businesses?
 8
               Yeah, they are so-called supply chain or
         Α.
9
     indirect impacts.
10
         Q.
               The numbers in that column aren't figures
11
     paid to the United States, correct?
12
               Not directly, but there are indirect
13
     impacts on the finances of all levels of Government,
     because any business activity generates tax revenue.
14
15
               Specifically the numbers in the fourth
16
     column of your figure represent dollar amounts paid
17
     to other businesses in the area, right?
               It is labor income, yes, from supporting
18
19
     industries, that is correct.
```

- 20 MR. HOSHIJIMA: Let's turn to CX488, which 21 is a figure cited in your direct exam.
- Q. (By Mr. Hoshijima) This is a table of state and local taxes resulting from the open pit mine, correct?
- 25 A. Yes. 0400
- 1 Q. These numbers are paid to the State of

New Mexico and the county?

```
3
               Yeah, and any other special districts like
 4
    fire, schools, you know, every municipality has a
     different arrangement of those.
 5
 6
              None of these numbers in this figure
 7
     represent numbers paid to the Federal Government,
 8
     right?
 9
               Yeah, the table is entitled State and
         Α.
10
    Local Taxes. That is correct.
              Let's turn to Federal taxes.
11
12
     United States did not tax Molycorp any differently
13
     from any other business, did it?
14
               I don't believe so. I didn't see any
         Α.
15
     special provisions I just see --
16
               MR. HOSHIJIMA: Let's turn to CX489.
               (By Mr. Hoshijima) Is this your estimate
17
18
    of Federal taxes resulting from the open pit mine?
19
        Α.
               Yes, it is.
20
         Q.
               The first column is labeled FICA.
21
               Do you see that?
22
         Α.
               Yes.
23
         Q.
               Are those FICA taxes that fund Social
24
    Security and Medicare?
25
              Yeah, those are the employer and employee
0401
    contributions to social insurance.
 1
               These numbers aren't numbers that go into
    the Government's general treasury, right?
               Well, Social Security is a major
 5
     entitlement program that is part of the Federal
 6
     budget so, yes, they are.
 7
               The second column unemployment?
         Q.
 8
         Α.
               Yeah.
9
               Those represent the amounts paid for
10
     funding Federal unemployment benefits?
11
         Α.
               Yes.
12
               The benefits would go, then, to all
13
     recipients of unemployment benefits?
14
               Yes.
         Α.
15
               The other Federal taxes that Molycorp
         Q.
16
    paid, do they go to various Government benefits and
    services like highways and national defense?
18
        Α.
              Would you rephrase that question or state
19
     it again, please.
20
               The other Federal taxes that Molycorp
         Q.
21
    paid, do they go to funding Government benefits like
    national defense and highways?
23
               Yeah, that is what all of our tax, that is
24
    what we do when we pay taxes, we are paying for
25
    public goods that the Government provides, like
0402
 1
    national defense.
```

```
Molycorp benefited from all of that,
         Q.
 3
     correct?
 4
         Α.
               Yeah, as we all do.
               Let's turn to the part of your testimony
 5
     where you talk about economic benefits created for
 6
 7
     consumers.
 8
         Α.
               Okay.
 9
               Your opinion is that the Questa Mine
         Q.
10
     created savings for purchasers of molybdenum,
11
     correct?
12
         Α.
               Yes.
13
               You also say, though, that the Government
         Q.
14
     was not a purchaser of molybdenum, correct?
15
               The main -- not a direct purchaser, but
16
     the main users of molybdenum are ferro and stainless
17
     steel producers. And they produce products that are
18
     bought by General Motors, Caterpillar tractor,
19
     General Dynamics that make submarines and aircraft
20
     carriers. And, again, that is part of the supply
     chain and so I think this distinction about, you
21
22
     know, who buys directly is splitting hairs.
23
               The Government in providing national
24
     defense for everyone, as you have mentioned, has to
25
     buy big capital goods that are made out of steel,
0403
 1
     and a lot of those goods, particularly in defense,
 2
     have molybdenum in them because they have certain
     physical properties that are unique to defense
 4
     equipment.
 5
         Q.
               The direct purchasers of molybdenum are
 6
     generally private steel companies, correct?
 7
               It is my understanding, yes.
 8
               Who then sell the steel to many companies,
         Q.
9
     like you said, Caterpillar, other --
10
               Thousands of different companies, yes.
11
               Because molybdenum containing steel has a
12
     lot of applications in the private industry,
13
     correct?
14
               Private and defense industries.
         Α.
15
         Q.
               In fact, molybdenum containing steel is
16
     used in mining equipment, correct?
17
               I guess so, I don't know the details. We
18
     have another expert coming up that probably could
19
     speak to that.
20
               Going further down in your direct
         Q.
21
     testimony you say that the Questa open pit mine had
     a significant impact on molybdenum market prices,
23
     correct?
24
               The operation of the open pit mine?
         Α.
25
               Yes.
         Q.
0404
 1
        Α.
               Yes.
```

- Q. And you do that based on an economic model that you applied in this case?
 - A. Right. Simple supply and demand.
- Q. In explaining that model in your direct testimony, you explained that in a competitive market with many producers, any one producer would not have a significant impact on market prices, correct?
- A. Right, because there would be thousands, maybe millions of individual firms.
- Q. It is when there is a dominant producer that can charge a monopoly price that your analysis results in finding impacts to market prices?
- A. Well, my analysis applies to both, really empirically, but the -- you raise a good point about the unique features of the molybdenum market.

Historically it has been dominated, was dominated by one firm, Climax. And, in fact, in 1960 Climax produced 85 percent of the molybdenum in the United States. And there was a concern in the Department of Justice about the competitive consequences of that because there are other examples and other industries where a dominant firm, like Standard Oil 100 years prior, exerted their

market power and was found to be in violation of antitrust laws.

MR. HOSHIJIMA: Let's pull up CX105.

- Q. (By Mr. Hoshijima) Is this the 1960 report that you were referring to?
 - A. Yes.

MR. HOSHIJIMA: Let's go to Page 5.

- Q. (By Mr. Hoshijima) Do you see in the second paragraph where it says that, "As of 1960 much of the total supplier of molybdenum comes as a byproduct of copper and tungsten"?
- A. Well, I see molybdenum's direct production is associated with byproducts and much of the total supply comes as a byproduct of copper and tungsten.
- Q. Do you understand that to mean that molybdenum is produced as a byproduct by copper companies that are mining copper?
- A. Yes, and that is the structure of the market. There is a dominant firm, Climax, with a market share that varies, as I have mentioned, from a high of 85 to 35, 40 percent.

And then there is Questa that is coming in and out of the market over the decades.

And then there is the byproduct producers of molybdenum who are primarily in the business of

producing copper and tungsten and they respond to

incentives in that market, not the molybdenum
market.

MR. HOSHIJIMA: Let's take out, let's remove this magnification. Let's look at the bottom of the page where it describes Climax, the one dominant primary producer of molybdenum. That is what you have been discussing, correct?

- A. That's correct.
- Q. The report then goes on to say, though, that, "Climax's position appears somewhat mitigated by the emergence of important byproduct production of molybdenum by copper companies."

Is that correct?

- A. That is correct and it is important and I would underline somewhat mitigated, that is, to us and I read that, that there are limitations to that mitigation.
- $$\operatorname{MR}.$$ HOSHIJIMA: Let's go two more pages forward in this report.
- Q. (By Mr. Hoshijima) Do you see in the second paragraph where it says that, "From a third to a half of molybdenum has been produced as a byproduct of copper and tungsten production"?
- A. Yes.

Q. And that the copper producers, at times when there is less demand for molybdenum, can skip that byproduct production of molybdenum.

Do you see that?

- A. Yes.
- Q. That means on the flip side, do you see where it says, "There is great flexibility in the molybdenum market"?
 - A. Yes, I see that.
- Q. So in times of less demand the copper companies might not make as much byproduct molybdenum but conversely when demand increases copper companies can fill that void?
- A. That is what the implication is, I agree with that. But I might add if, I don't know where you are going with this, but if you read on in the document at the very end of the document, I think this is written by the Attorney General of the United States. He says that there is some concern about the competition in the market with such a dominant producer, so byproduct producers, they kind of come and go in the market, primarily dependent on market conditions in their market, not necessarily molybdenum.
- So it is not a guarantee that in times of 0408
- 1 lean demand copper producers may omit processing of

```
byproduct molybdenum. It really kind of depends on
 3
     what is happening in copper and tungsten because
 4
     that is their main line of business.
 5
               MR. HOSHIJIMA: Let's turn to Page 8 of
 6
     this report. PDF Page 11.
               (By Mr. Hoshijima) This part of the
 7
 8
     report further discusses those copper companies that
 9
     produce molybdenum as a byproduct, correct?
10
               Yes.
11
         Q.
               It says that an important source that is
12
     more recently developed as of this 1960 report is
13
     molybdenum bearing copper ores?
14
               Correct.
         Α.
15
               Further down in that paragraph do you see
16
     how it says that the amount of byproduct production
17
     of molybdenum from copper companies may fluctuate as
     a factor of, and one of the factors it lists is the
18
19
     demand for molybdenum justifying the costs of its
20
     separate extraction?
21
               I see that.
         Α.
22
               So it is saying that when demand for
23
     molybdenum goes up, that might make it more
24
     worthwhile for some of these copper companies to
25
     produce molybdenum as a byproduct?
0409
 1
               If the level of prices in the copper
         Α.
 2
     market justifies the level of copper production.
 3
               THE COURT: Counsel, would this be a good
 4
     time to take our afternoon break?
 5
               MR. HOSHIJIMA: Yes, Your Honor.
 6
               THE COURT: Thank you. We will be in
 7
     recess for 15 minutes.
 8
               (A recess was taken.)
 9
               THE COURT: You may be seated.
10
              (By Mr. Hoshijima) Dr. Considine, before
     the break you recall we were talking about this 1960
11
12
     Government report, correct?
13
               Yes, sir.
         Α.
14
               We were talking about the recent
15
     development of molybdenum bearing copper ores?
16
               You mean the byproduct?
         Α.
17
         Q.
               Yes.
18
         Α.
               Yes.
19
              Do you see near the bottom of this page
         Ο.
20
     where it discusses how Kennecott Copper Company is
     the largest byproduct producer?
21
22
         Α.
               Yes.
23
               You have heard that company name come up a
```

in the world, correct?

24

25

0410

operates one of the largest open pit mining ventures

number of times in this trial, but Kennecott

- A. Yes, I see this.
- Q. That is a source for byproduct molybdenum production?
 - A. Yes.

MR. HOSHIJIMA: Let's turn to PDF Page 14.

- Q. (By Mr. Hoshijima) Looking at the second paragraph, do you see how, as of 1960 -- and again this is before the start of the open pit mine -- this report says that commercially recoverable reserves are estimated as sufficient for 50-year supply?
 - A. That is what the passage reads, yes.

 MR. HOSHIJIMA: Let's turn to PDF Page 21.
- Q. (By Mr. Hoshijima) Do you see that in 1950 there were four companies involved in byproduct production of molybdenum?
- A. Yes, that is what the first sentence indicates.
- Q. Midway through that paragraph it describes how by the end of that decade there were nine companies doing that, correct?
 - A. Correct.

MR. HOSHIJIMA: Turning to PDF Page 33.

Q. (By Mr. Hoshijima) First paragraph under

Competitive Effect, do you see how it says that, "Molybdenum byproduct occurrence and copper ores provides a considerable degree of reserve capacity for expended production"?

- A. Yes, that is what it indicates.
- Q. That is referring, again, to the idea that copper companies could increase their byproduct production of molybdenum if there is demand, right?
- A. It could, but as I cautioned before the break, there is actually two factors involved in the supply from byproduct producers of molybdenum. It would be the price of the main product and the price of molybdenum.
- Q. This 1960 report, after discussing the byproduct production of molybdenum, says that, "a real shortage of molybdenum is unlikely," correct?
- A. That is what it reads. That is correct. MR. HOSHIJIMA: We can take this document down.
- Q. (By Mr. Hoshijima) When molybdenum is added to steel, molybdenum is about 1 percent of the ultimate product, right?
- A. I am not a metallurgist, so I can't opine on that.
- 25 Q. So you don't know how much of molybdenum 0412
 - ends up in the final steel product?

- I have done studies on tracking ferroalloys into alloy and stainless steel production on tonnage basis, but I don't know, you know, the percent contents off the top of my head.
- The analysis you did for your direct testimony was about the impact of the Questa Mine on the market prices of molybdenum, right?
 - That is right, molybdenum concentrate.
- You did not analyze how much the Questa Mine production would have affected the price of steel?
 - No, I didn't look at that. Α.

7

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25

0414 1

- The purchasers of molybdenum, again, were private steel companies, right?
- For the most part. There are many different uses, chemicals and other nondurable products use molybdenum powders, and so on. I didn't really do a detailed end use analysis in my report, I just looked at the market for molybdenum concentrate and the impacts that the stockpile sales and Questa production had on the price.
- Q. That price reduction would have gone to the benefit of the private steel companies, right?
- As I have mentioned before, that is 0413

correct, that would lower the cost of producing goods, primarily capital goods that contain molybdenum bearing steel.

- If it were the case that molybdenum makes Q. up about 1 percent of steel, does that mean that the price impacts would not really be felt by the consumers of steel?
- Well, I compute the consumer cost savings from lower molybdenum prices from -- that results from the Questa production and those numbers are reported in the report. And they amount to hundreds of millions, billions of dollars over the entire mining period, so they are worthy to take note. Granted they are a small fraction of the overall economy and overall steel use, but every little bit helps.
- In your direct testimony you describe the Q. Federal Government's stockpile of molybdenum, correct?
 - Α. Yes.

MR. HOSHIJIMA: Let's turn to Page 42 of your testimony.

(By Mr. Hoshijima) You say that, "Because Questa represented a new and significant source of molybdenum, Questa reduced the United States

Government's need for the strategic stockpile"?

- A. Yes, I noted that the United States sold 27.6 million pounds of molybdenum from the strategic stockpile just prior to the startup of the Questa open pit mine.
- Q. When you referred to the new and significant sources of molybdenum, you are talking about the open pit mine starting in 1965, right?
 - A. Yes.

- Q. Your opinion is that that open pit mine is what allowed the Government to start selling molybdenum from the stockpile?
- A. I pointed that out and, you know, there are a lot of -- any economic decision made by the Government or market entails many factors, and this could have been one of them because it was significant because Questa was a primary producer.

All of the other, there was Climax as a primary producer, now the United States had another second significant primary producer producing roughly 10 percent of the market of total production, and then the byproduct producers, further diversifying and adding to the flexibility in the market, which I think is a good thing.

MR. HOSHIJIMA: Let's turn to USX053 on 0415

1 Page 134. This exhibit has been previously 2 admitted.

- Q. (By Mr. Hoshijima) Do you see that it represents the national stockpile goals plotted against their inventories?
- A. Yes, the inventory levels are the Xs and the goals are the plus signs.
 - Q. This is for molybdenum disulfide?
- A. Yes.
 - Q. Do you see that it is about 1958 that the inventories, which again are shown with the plus marks, are -- sorry, strike that.

Do you see that it is about 1958 when the inventories, which are represented by the X mark, meets the goal for the stockpiling of molybdenum?

- A. Yeah, they may be a few years earlier it intersects at that point.
- Q. Certainly years before Molycorp opened the open pit mine, correct?
- A. Yeah, I think it is important to keep in mind what else was happening at the period. And if you look at Climax production in particular during the 1950s, it increased dramatically.
- Q. So Climax's production, not the Questa open pit mine, is what allowed the Government to
 - meet its stockpile goals?

```
A. I didn't say that. I think it is a contributing factor. There are a lot of other factors in the management of the stockpile. It is not just the supply, but the anticipated demand and the probability. The whole point of owning a stockpile, and this is what the Defense Department and other Government agencies do, is they, they war game it, you know. They think, okay, what happens if we fight, for instance, World War III, which was a real concern at this time, how much material would we need. So the demand in both the supply side considerations are, I think, likely taken into account.
```

- Q. Even if a lot of factors are taken into account, how could it be that the Questa open pit mine production is one of those factors if 1958 is before the DMEA even certifies a discovery?
- A. Well, I think it is just the simple idea that Government concerned about the availability of materials keeps in mind that there -- they are trying to develop a diverse portfolio of assets and Questa would fit into that strategy.

MR. HOSHIJIMA: Let's look at USX081, which has been previously admitted.

0417

1 Q. (By Mr. Hoshijima) Do you see this as a
2 January to June 1956 stockpile report to Congress?

A. Yes, yes.

MR. HOSHIJIMA: Let's turn to Page 24.

Q. (By Mr. Hoshijima) There is a section on molybdenum on the top left of the page.

Do you see that?

A. Yes.

- Q. Again, this is in a 1956 report. Do you see how, because of an improved defense position for molybdenum, the Government actually instead of receiving deliveries to the stockpile deferred them to private industry?
 - A. I see those words, yes.
- Q. 1956, which is nearly ten years before open pit production, the Government no longer needs these deliveries to the stockpile, correct?
- A. Well, the future is important to consider, but the past is as well. And the thing to keep in mind here is the United States just finished fighting the Korean War and there were major problems in the steel industry. And maybe some of those problems have -- were resolved at this time.

So I would ask, and I am not sure here, what the improved defense position for molybdenum

actually is. It is not really explained here.

```
Whatever it is, though, it doesn't have
 3
     anything to do with what Molycorp is doing in
 4
     Questa, right?
 5
               Well, when was this, in '56, this
         Α.
 6
     document?
 7
         Q.
               Yes.
               Well, like I said, you know, this is part
 8
         Α.
 9
     of what stockpiling programs do is they try to look
10
     around the world for sources of supply in
     anticipation of future demand. And for this
11
12
     particular material, that defense scenario would
13
     play prominently.
14
               This document near the end of this
         Q.
15
     paragraph notes, "The capacity of domestic producers
16
     in Colorado and Arizona," when it talks about the
17
     stockpile being met, right?
18
               Well, it is just saying that capacity of
         Α.
19
     domestic producers in Colorado and Arizona is being
20
     increased, presumably. Well, that is the byproduct
21
     producers part of this diversified portfolio.
22
              No mention in this paragraph of production
23
     in Questa, New Mexico, that would allow the
24
     Government to defer deliveries to the stockpile,
25
     right?
0419
 1
                       This is 1956 and what the DMEA
         Α.
               Right.
 2
     loan really started, I guess, they started work in
 3
     '57, so this is before then, yeah.
 4
               This is before the DMEA contract is even
         Q.
 5
     signed, correct?
 6
        Α.
               Yeah.
 7
               MR. HOSHIJIMA: Let's pull up USX539.
     This has been previously admitted.
 8
9
               (By Mr. Hoshijima) Do you see that it is
10
     the January to June 1957 stockpile report?
11
        Α.
               I do.
12
               MR. HOSHIJIMA: Let's turn to Page 10.
13
               THE COURT: Counsel, can I inquire as to
     where you are going with this year by year hour per
14
15
     hour? It seems irrelevant to what we are here for.
16
               MR. HOSHIJIMA: This is one more document
17
     about the state of molybdenum in the United States
18
     when Molycorp is seeking the DMEA loan.
19
               THE COURT: Well, so what?
20
               MR. HOSHIJIMA: Chevron is arguing that
21
     the Government had a significant defense interest in
     molybdenum at that point in time.
22
23
               THE COURT: Well, there was a comment
             I think it has been covered over and over
24
     there.
25
     again.
0420
 1
              MR. HOSHIJIMA: I will move on.
```

```
(By Mr. Hoshijima) The Government
    eventually sold off excess molybdenum from the
3
    national stockpile, right?
4
5
              Yes.
        Α.
```

- We saw that it was in 1958 when its Q. inventory was met?
- Well, that is where the goals intersected with the inventory levels.
 - When the goals were met? Q.
 - Α. Yeah.

7

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4 5

6 7

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21

- 12 But it is actually not until 1975 that the 13 last bit of molybdenum is sold off from the 14 stockpile, right?
 - That is what the historical record indicates, yes.
 - That is because the Government took its time to make those sales so it didn't flood the market, correct?
 - Yeah, that is always a concern with the drawdown of a stockpile.
 - Ο. The Government --
- Unless it is intended, for instance, for 23 Α. 24 example in the case of oil.
- 25 To avoid disrupting the market, then, the 0421
 - Government, even after the stockpile inventory goal 1 had been met, took its time releasing molybdenum from the stockpile, right?
 - Well, that wasn't really a focus of my analysis. I just took the numbers as they were to make a judgment call of whether that was the best route, I don't know, I can't really make that judgment.
- Final topic, then, you discuss sales of 10 molybdenum from the stockpile in your direct 11 testimony, correct?
 - Yes.
 - Are you aware that Molycorp was a purchaser of molybdenum from the national stockpile?
- 15 I believe so. It is not clear to me, but 16 I will grant you that.
 - MR. HOSHIJIMA: Let's pull up USX098.
- This has been previously admitted. 18
- 19 (By Mr. Hoshijima) Do you see this is a Q. 20 1964 GSA news release?
 - I do. Α.
- 22 Do you see that Molycorp has bid for sale Q. 23 of molybdenum from the stockpile?
 - That is what it indicates, yes. Α.
- 25 Molycorp was awarded a bid, right? Q. 0422
- 1 Α. Yeah, awards went to three bidders and

```
there they are.
 3
              Molycorp then benefited from sales of
 4
     molybdenum from the stockpile, right?
 5
               Behind every side of the sale there are
 6
     two winners, the seller and the buyer. Yeah, they
 7
     were probably buying this molybdenum to hoist in
 8
     there processing facilities.
 9
               MR. HOSHIJIMA: USX103, please.
10
     been previously admitted.
11
               (By Mr. Hoshijima) Do you see it is a
     1969 GSA news release?
12
13
               Yes.
        Α.
14
               Do you see that again in 1969 Molycorp is
15
    purchasing molybdenum from the national stockpile?
16
               Yes. And I interpret this as just the
17
     likely fact that they had excess capacity to process
18
    molybdenum and they saw it in their best interest to
19
    pursue this opportunity.
               And the Government didn't need it at that
20
21
     time, right?
22
        Α.
               Well, that is implied. They are selling
23
     it, so if you sell something you want to get rid of
24
     it, yes.
               MR. HOSHIJIMA: I have no further
25
0423
 1
    questions.
 2
               THE COURT: Thank you. You may redirect.
 3
               MR. HOPSON: Yes, Your Honor.
               Good afternoon, Your Honor.
 4
 5
               THE COURT: Good afternoon.
 6
                     REDIRECT EXAMINATION
 7
         BY MR. HOPSON:
 8
               You are currently an economist at the
9
     School of Energy Resources at the University of
     Wyoming, right?
10
11
               Yes.
         Α.
12
         Q.
               And prior to that time you spent some time
13
     at Penn State focusing on mineral economics, right?
14
               That's correct.
               So are you familiar with issues around
15
         Q.
16
    valuing, evaluating and seeking mine financing?
17
               Somewhat. I don't have direct experience
     in that, but, yeah, I have rubbed elbows with a lot
18
19
     of people who have written programs that support
20
     that activity.
21
               I believe you said that when you did your
22
     analysis you used before-tax cash flow for a reason.
23
               What was the reason?
24
               The reason is that it is considered the
         Α.
25
    gold standard of mineral project evaluation and it
0424
     strips away all the complexities and distortions of
```

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the tax code. So you really want to make your
investment decision based on the cash generating
capability of the project.
```

MR. HOPSON: We saw, and I am going to ask Ms. Hutchman to put up Chevron Exhibit 123, which is the 1963 annual report.

- (By Mr. Hopson) Do you remember looking Q. at that?
 - Α. Yeah.
- Let me see if I can do it without the Q. document, make it quicker.
 - Okay. Α.
- You were shown some information that Q. suggested that the benefits of the tax deduction were substantial in one year, that is, the tax deduction for capital appreciation to Questa, yes?
 - Α. Yes.
- Q. Have you seen that for any other year during the operation of the mine?
 - I did not. Α.
- You are familiar as an economist with the timeline of what happened at the Questa Mine, correct?
 - Α. Yes.

25 0425 1

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- And in December of 1956 at the time that Molycorp was applying for assistance from the United States Government, what was the state of their reserves?
- 5 They were essentially tapped out of 6 molybdenum at the Questa site. 7
 - Were they in production?
 - No. I believe they shut down somewhere, Α. sometime in 1956 or '57.
 - Q. Did they have any planned exploration?
 - No. In fact, one document indicated explicitly that they had no plans to conduct further exploration.
 - In your experience with mine financing and mineral economics, is it likely a private lender, like a bank, would have loaned money for exploration at the Questa site given the mineral economics on the ground?
 - Α. I think it would be unlikely because there -- it was basically a tapped out operation. It was a small play that was played. And unless there was something else that attracted attention, then it would probably be passed upon.
- 24 There were questions you were asked about 25 whether it was risky to take out bank loans. 0426
- 1 Do you remember those risk questions?

```
A.
               I do.
         Q.
               Was it risky to lend to Molycorp once they
 4
     had in hand a DMEA certification of mineral
     discovery?
 5
               That really impressed me because I looked
 6
 7
     at that document and there was a big number. I
 8
     think it was 2 billion pounds of possible reserves.
 9
     And based on my experience in risk evaluation, one
     of the key elements of risk is whether a resource is
10
     there or not. And just the fact that someone with
11
12
     credibility like the USGS or the DMEA loan people
13
     saying, yes, there is a resource here and it is
14
     significant would immediately lower that risk
15
     premium that people subjectively put on any
16
     investment.
               Particularly investments in minerals
17
         Q.
18
     exploration?
19
        Α.
               Yes.
20
               MR. HOPSON: Let's look, Ms. Hutchman, at
21
     US Exhibit 519.
22
               (By Mr. Hopson) And looking at the first
23
     page here you will see this is a report to
24
     stockholders of Molycorp for the year ended
25
     December 31, 1955, correct?
0427
 1
         Α.
               Correct.
 2
               And if you flip over a couple of pages you
    see that this is actually issued on March 1, 1956,
     correct?
 5
         Α.
               Correct.
 6
               Now, you were asked questions about this
         Ο.
 7
     document and particularly asked questions about the
 8
    balance sheet.
 9
               Do you recall that?
10
         Α.
               Yes.
11
               MR. HOPSON: Let's go to Page 6.
12
               (By Mr. Hopson) This was a page you were
13
     asked questions about.
14
               Do you recall that?
15
               I do.
         Α.
16
               Now to start with this is a consolidated
         Q.
17
     balance sheet, correct?
18
        Α.
               Correct.
19
               So it includes not only the Questa Mine
         Ο.
20
    but all of the rest of Molycorp's businesses,
21
     correct?
22
               That's correct.
        Α.
23
               You were pointed to the line in the
         Q.
24
     balance sheet that said that Molycorp had at that
     moment in time $3.150 million in cash, correct?
25
0428
 1
        A. Correct.
```

- Q. Does that mean to you, Dr. Considine, that
 Molycorp has \$3.1 million to invest in exploration
 the Questa Mine?
 A. No, it doesn't.
 MR. HOPSON: Let's flip to the next page.
 - Q. (By Mr. Hopson) Can you tell me, Dr. Considine, what their current liabilities were at the time they had \$3.1 million in cash?
 - A. About 3.7 million.
 - Q. So Molycorp wasn't exactly cash rich at that moment in time?
 - A. No. In fact, in my report I compare rates of return before and after the '56, '57 period and it was a clear break in the trend. And, you know, it is almost two-thirds lower after the depletion of the Questa mine.
 - Q. I'm sorry, I probably just doesn't catch that. What was two-thirds lower?
 - A. The return on assets.
 - Q. Okay.

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- MR. HOPSON: Ms. Hutchman, let's look at US Exhibit 3.
- Q. (By Mr. Hopson) Again, I am not going to go through everything you were shown in this, but do 0429
- you recall looking at this SEC register statement and being asked if the company had obtained financing in 1954 and 1955?
 - A. Yes, I recall.
 - Q. And was that consolidated corporate financing or was it specific to Questa?
 - A. I believe it was consolidated.
 - Q. And, again, back to your familiarity with mine financing, is raising money for a consolidated corporation a different process than raising money specifically to explore for a mineral at a specific cite?
 - A. Yes. There is a lot more exacting information that is required for a specific site.
 - Q. What kind of exacting information, sir?
 - A. Oh, such as the location, the mineral, the amount of mineral that could be recovered, estimated costs, transportation infrastructure to the site, et cetera.
- Q. Just one question I want to ask you about US Exhibit 481.
- You were asked the question about the statement that says to date a total of \$110 million has been invested.
- Let me ask you, do you know what time 0430
 - period that refers to?

I do not.

Α.

```
3
         Q.
               Is there anything else in this document
 4
     that indicates that?
 5
               I read it, I couldn't figure it out.
 6
               MR. HOPSON: We can put that document
 7
     aside.
 8
              (By Mr. Hopson) I want to talk a little bit
 9
     about the Attorney General's report to Congress
     dated May 27, 1960, which is in evidence as
10
11
     Chevron 105.
12
               Are you familiar with that document,
13
     Dr. Considine?
14
               Yes, I am.
         Α.
15
               To begin with, this is a report to
16
     Congress by the Attorney General of the
17
     United States that solely focused on the molybdenum
     market and molybdenum industry, correct?
18
19
         Α.
               Correct.
20
         Ο.
               Does that suggest to you that the United
21
     States Government believes that molybdenum is
22
     important in 1960?
23
         Α.
               Yes. It is the Attorney General of the
24
     United States picking out one material among many.
25
     It is significant.
0431
 1
               Let's look -- I am having a hard time
 2
     reading the number at the bottom of the page, but I
 3
     believe it is Page 13 to 43, it is actually Page 10
     in the original report.
 5
               You were asked quite a few questions about
 6
     whether there was molybdenum supply as a byproduct
 7
     of copper production.
 8
               Do you recall those?
 9
               Yes, I do.
         Α.
10
         Q.
               Can you look at Table Number 1 and tell us
11
     generally the trend for byproduct production from
12
     1950 through 1959?
13
               From byproduct ore?
         Α.
14
               Yes, by product ore.
         Q.
15
         Α.
               Just eyeballing I don't see a trend, it is
16
     up and down, rather zigzag pattern.
17
               Do you know whether there was a strike at
     the Climax mine in 1958?
18
19
               Yes, I did see an oblique mention of that.
         Α.
20
         Q.
               If you exclude 1958 do you see a trend?
21
         Α.
               Yes. Climax was increasing production
22
     significantly.
23
               MR. HOPSON:
                            I would like to ask us to
24
     turn to Page 31 in the original report, which I
25
     believe is Page 34 of the document itself.
0432
 1
         Q.
               (By Mr. Hopson) Now, you have read the
```

```
report before, correct?
 3
         Α.
               Yes.
 4
               MR. HOPSON: In the middle paragraph, if
 5
    we could call that out.
               (By Mr. Hopson) The Attorney General
 6
 7
     reports that in 1950, direct production came from
 8
     only two firms, one clearly dominant. Who are the
 9
     two firms?
10
         Α.
               Climax and Questa.
11
         Q.
               And which is the dominant one?
12
         Α.
               Climax.
13
               You referenced, I don't know exactly how
         Ο.
14
    you put it, but potential antitrust concerns,
15
     competition concerns by having a dominant firm.
16
               Do you recall that testimony?
17
               I do.
         Α.
18
         Q.
               Look at the last sentence of that
19
     paragraph, which reads, "But the existence of a
     single primary producer of an important metal
20
21
    necessarily occasions some uneasiness and doubts are
22
     increased by concern for competition in associated
23
     nonferrous metal production."
24
               Does that statement by the Attorney
25
     General relate to your expressed concern about a
0433
 1
    dominant role for Climax in the molybdenum market?
 2
        Α.
               Yes, it does, very much so. And this is
     why I have mentioned in my testimony that one of the
    motivations or considerations in the stockpile and
 5
     also the DMEA loan is this competitive balance in
 6
    the molybdenum market. And the need for the
 7
    Government and particular the steel firms who are
    producing these vital materials for defense to have
 8
 9
     a diversified source of supply and some sway over
10
     the price, some negotiating power over the price as
11
     opposed to being at the whims of a single producer.
12
               And when we look at this market overall is
13
     the byproduct supply a reliable or stable one as you
14
     look at the market?
15
               No. I see that there are many other
         Α.
16
     factors that, besides the price of molybdenum, that
     affects the source of byproduct molybdenum supply in
18
     particular the price of copper and tungsten, that
19
     may not necessarily move with molybdenum prices.
20
              Okay. If we could turn back to Page 30 of
         Q.
21
     the report, which again appears to be Page 33 of the
     exhibit. I just want to show you and you can look
22
23
     at it in your binder if you want to, that the last
     few pages of this report the Attorney General is
```

A. That's correct.

25

0434

addressing competitive effects; is that correct?

```
He is noting both negative and potentially
 3
     positive competitive effects, correct?
 4
               Yes, yes.
         Α.
 5
               MR. HOPSON: Could we turn to Page 32,
 6
     which is Page 35 of the exhibit, and could you
 7
     highlight the first complete sentence on that page.
               (By Mr. Hopson) Would you read that for
 8
         Q.
 9
     me, Dr. Considine?
10
               "And when the Molybdenum Corporation of
11
     America's mine exhausted its main ore resources,
12
     defense production assistance was granted to enable
13
     it to explore new ore sources."
14
               So the Attorney General believed that the
15
     DMEA program enabled Molycorp to find new ore
16
     sources?
17
         Α.
               Yes.
18
         Q.
               And the Attorney General reported that as
19
     a favorable development in the competitive market?
20
21
               I am not going to pull out a lot of these
         Q.
22
     documents, but you were asked a number of questions
23
     that to me sounded like they were suggesting that
24
     molybdenum was not really that important.
25
               Do you remember those questions?
0435
 1
         Α.
               Yes, yes.
 2
               Was molybdenum on the stockpile list all
         Q.
     the way through 1970?
               Yes, it was stockpiled and then there was
 4
 5
     positive levels of the stockpile until 1975.
 6
              Positive levels meaning molybdenum
 7
     remained in the stockpile?
                     There was a stockpile of molybdenum
 8
               Yeah.
 9
     until 1975.
10
         Ο.
               And was Molycorp listed as a strategic
11
     mineral critical for national defense throughout
12
     that time period?
13
               Yes, my understanding.
         Α.
14
               MR. HOPSON: If we could just call up the
15
     front page of US Exhibit 81.
16
               (By Mr. Hopson) Do you recall looking at
17
     this document with a bunch of questions suggesting
18
     that there were plenty, there is plenty of
19
     molybdenum around?
20
         Α.
               Yes.
21
               And what is the date of this stockpile
         Q.
22
     report?
23
               January to June '56, 1956.
         Α.
24
               We know something, though, about the
```

1 forward with the DMEA contract at Questa Mine after

U.S.'s view about molybdenum because the U.S. went

Ο.

```
this report, right?
 3
         Α.
               Correct.
 4
               MR. HOPSON: Let's look at Chevron
 5
     Exhibit 48, please.
 6
               (By Mr. Hopson) This is, if you don't
 7
     recall, it is a collection of internal
 8
     correspondence and memoranda between and among
 9
     various Government officials.
10
               Do you recall looking at this?
11
         Α.
               Not in detail, I just scanned it.
12
               Well, let me just call your attention to
         Q.
13
     Page 10 of 10 of the exhibit.
14
         Α.
               Okay.
15
         Ο.
               This is after the stockpile report, right?
16
               Right, December 12, 1956.
         Α.
17
               This is a memorandum from a fellow who is
     a commodity specialist in the Branch of Ferrous
18
19
     Metals and Ferroalloys to the Chief of the Rare and
20
     Miscellaneous Metal Division in the DMEA, right?
21
         Α.
               Correct.
22
               MR. HOPSON: And if you highlight the last
23
     full paragraph, the full sentence.
24
               (By Mr. Hopson) It suggests what the
25
     United States really thinks about the importance of
0437
 1
     molybdenum at this point.
 2
               He states, "The strategic importance of
 3
     molybdenum and the limited noncommercial deposits
     makes it highly desirable, in my opinion, to
 4
 5
     endeavor to increase known reserves whenever
 6
     feasible."
 7
               Did I read that correctly?
 8
               You sure did.
         Α.
9
               And was this desire to increase the supply
10
     of molybdenum, and particularly to support a second
11
     primary producer the reason the United States
12
     entered into the DMEA contract?
13
               It is probably an overarching
14
     consideration in that decision, very important.
15
               MR. HOPSON: I have no further questions,
16
     Your Honor.
17
               THE COURT: This witness can be excused.
               (Whereupon, the witness was excused.)
18
19
               THE COURT: Do we have one short witness,
20
     maybe a 10-minute witness?
21
               MR. TODD: I believe we do, Your Honor,
     but may I deal with a couple of housekeeping matters
22
23
     first just to explain where we are in the cadence of
     the trial.
24
25
               First, a couple of non-witness evidentiary
0438
     issues. We have referred a few times to the two
 1
```

```
stipulations that were previously entered with the
 3
     Court's record on the Court's docket. Those are
 4
    Dockets 160 and 158.
 5
               As those are evidentiary stipulations, we
 6
    would like to move them into evidence as part of the
 7
    hearing record.
 8
               THE COURT: Okay. Any objections?
 9
               MS. KIMBALL: No objection.
10
               THE COURT: Without objections they will
    be so admitted.
11
12
               (Exhibits admitted, Court's Docket 160 and
13
     158.)
14
               MR. TODD: Thank you, Your Honor.
15
               Secondly, there was another stipulation
16
     agreement between the parties that was not docketed
     and that -- but it is memorialized in an e-mail and
17
18
     that relates to the question of response costs. An
19
     element of an allocation action as the party
     bringing it has to prove that they have incurred at
20
21
     least some response costs, i.e., clean-up costs.
               And the Government has kindly agreed that
22
23
    we can stipulate that Chevron has incurred some
24
     costs without having to bring a witness in to
25
     testify to all of that money.
0439
 1
               So with the Government's agreement, I
 2
     would like to just make that clear on the record.
 3
               MS. KIMBALL: No objection.
 4
               THE COURT: Very good. So stipulated.
 5
               MR. TODD: Thank you, Your Honor.
               Thirdly, in Docket Number 223, which is
 6
 7
     when Chevron tendered its affirmative case to the
     Court, we identified a number of discovery responses
 8
     that we wanted to offer.
 9
10
               As the Court knows a party's responses in
11
     discovery are party admissions and admissible
12
     without a witness. I was going to offer those, but
13
     I understand from Ms. Kimball that the Government
14
     wants to stand on some of the objections within
15
     those responses. So rather than offer them now, I
16
    would like to hold the record open so we can
17
    hopefully resolve those and minimize what the Court
18
    will have to look at.
               THE COURT: Very good.
19
20
               MR. TODD: Thank you, Your Honor.
21
               With respect to witnesses, Your Honor,
22
     Chevron has two more witnesses but neither of whom
23
     we can call right now.
               You may recall from the January status
24
25
     conference that Bob Cryderman, who is an expert in
0440
 1
    molybdenum couldn't be here in the early part of the
```

```
week because he was at an academic conference.
    hope he is coming tomorrow and we had agreed
 4
    previously he would testify Thursday. We will get
    him on in the Government's -- as part of the
 5
 6
    Government's case, our case, but in the middle of
 7
    their case once he is here.
 8
               And secondly, I mentioned Dr. Haddad whose
 9
    mother had the stroke. We just need to agree on a
10
     date and a format for doing his cross-examination.
     We can discuss that now, I am happy to discuss that
11
12
     whenever Your Honor would like.
13
               THE COURT: Yeah, without knowing his
14
    particular status and I sort of know my status, like
15
    I am gone next week. We will have to just wait and
16
    see how it shakes out and we will make every effort
17
     to accommodate both parties. I know you would like
     to stay back east where it is more civilized than
18
19
     out here.
20
               MR. TODD: I would dispute that,
21
    Your Honor. Dr. Haddad has great flexibility, he
22
     simply doesn't want to leave Los Angeles while his
23
     mother is in this condition. If we could do it
24
     remotely he could probably do it any day, I
25
     shouldn't say any, that's overreaching. Most days
0441
 1
    when the Court could do it.
               So perhaps if Your Honor identifies dates,
 2
 3
     maybe put aside a half day. I am not sure it would
     even take that long. If you give us dates, then we
 4
 5
     could work around those.
 6
               THE COURT: So you assume that we will
 7
     Zoom him?
 8
               MR. TODD: If you are willing to do Zoom
 9
     and I know the Government would prefer to do it in
10
     person.
11
               THE COURT: Yeah, I am willing. We can do
12
     it from Santa Fe, too.
13
               MR. AUGUSTINI: May I be heard briefly,
14
     Your Honor, if you are done, Counsel?
15
               MR. TODD: Please.
               MR. AUGUSTINI: Yes, Your Honor.
16
17
    strong preference is to conduct live
18
    cross-examination. I am happy to come back to
19
    New Mexico, to Santa Fe if it is convenient for you.
20
    We will accommodate Dr. Haddad's schedule, obviously
21
     we understand their personal circumstances.
22
               So in terms of agreeing on a date, we will
23
    work with Chevron on that, but we do prefer live
24
     cross-examination. We just think it is just better
25
    overall.
0442
 1
               THE COURT: It probably is.
```

```
MR. AUGUSTINI: Thank you, Your Honor.
 3
               MR. TODD: I am sure we are all happy to
 4
     do it in Santa Fe. Your Honor, honestly, if we were
     thinking, we would have done this whole trial in
 5
 6
     Santa Fe. I apologize on behalf of both parties for
    not suggesting that.
 7
 8
               THE COURT:
                          That is all right.
 9
               MR. TODD: The last issue, Your Honor, a
10
     moment of personal privilege, we are now going to
    hand the case over to the Government to call their
11
     first witness, Ms. Sitton, who I believe we can get
12
13
    up and down very quickly today.
14
               But before I do that any efficient
15
     courtroom presentation doesn't rely on the folks at
16
    the podium, it is the folks in the back doing the
17
     work. I just wanted to introduce on the record
    Alexia Jansen, Matt Simpson and Deesha Shah, a
18
19
     couple of associates and a paralegal with my firm
20
     who have put in some tireless nights here.
21
               THE COURT: Welcome.
               MR. TODD: Thank you, Your Honor.
22
23
               THE COURT: Now it is 4:00. Do you really
24
    need to put this witness on today?
25
               MR. AUGUSTINI: No, actually I am afraid
0443
    that we would interrupt your trip back to Santa Fe
 1
     if we tried to, and I don't know how much cross
     Chevron has but, I may have some redirect.
     are happy to start first thing in the morning,
 5
     whatever time the Court prefers.
 6
               THE COURT: I would prefer to do that if
 7
    it is not a big inconvenience.
 8
               MR. AUGUSTINI: Whatever time Your Honor
9
    would like. We are happy to start earlier.
10
               THE COURT: We can start at 9:00.
11
    Tomorrow I have got a sentencing at 4:00 in another
12
     courtroom and on another case. Not one of you
13
    people, so we will be in recess, then, until 9:00
14
    tomorrow morning.
15
               Thank you.
16
               (Proceedings concluded at 3:58 p.m.)
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                    REPORTER'S CERTIFICATE
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I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter. I further certify that the transcript fees and format comply with those prescribed by the Court and the Judicial Conference of the United States. Date: March 15, 2022 PAUL BACA, RPR, CCR Certified Court Reporter #112 License Expires: 12-31-2022